SHARP

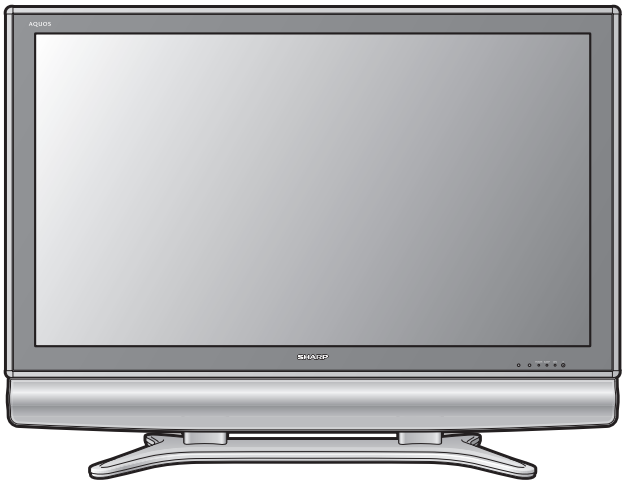
MODEL

LC-46GD7X
LC-52GD7X

LCD COLOUR TELEVISION

OPERATION MANUAL

AQUOS



FULL HD 1080P

DVB Digital Video Broadcasting

DOLBY DIGITAL

HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

LC-46GD7X
LC-52GD7X

LCD COLOUR TELEVISION

OPERATION MANUAL

Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

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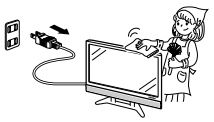
Trademarks

- Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

- “HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.”

Important Safety Precautions

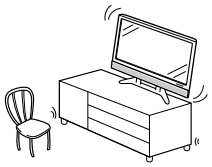
- Cleaning—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.



- Water and moisture—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.

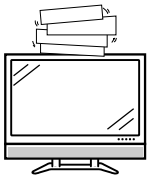
- Do not place vases or any other water-filled containers on this product.
  The water may spill onto the product causing fire or electric shock.

- Stand—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.



- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.

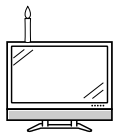
- Ventilation—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.



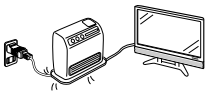
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is struck forcefully or with a sharp object. If the LCD panel is broken, be careful not to be injured by broken glass.

- Heat sources—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).

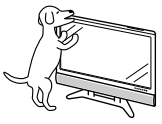
- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.



- To prevent fire or shock hazard, do not place the AC power cord under the TV set or other heavy items.



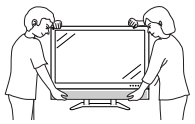
- Do not place heavy objects on this product or stand on it. Doing so could cause injury if the product overturns. Take special care near children and pets.



The LCD panel is a very high technology product with 6,220,880 thin film transistors, giving you fine picture details.
Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red.
This is within product specifications and does not constitute a fault.

Precautions when transporting the TV

Be sure to always carry the TV by two people holding it with two hands—one hand on each side of the TV.

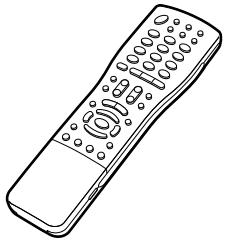
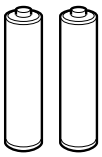
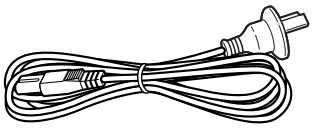


- Do not display a still picture for a long time, as this could cause an afterimage to remain.

- Install the product in a place where the AC cord can be easily unplugged from an AC outlet and the AC INPUT terminal on the rear of the product.

Supplied accessories

Make sure the following accessories are provided with the product.

Remote control unit	“AAA” size battery (×2)	AC cord
		
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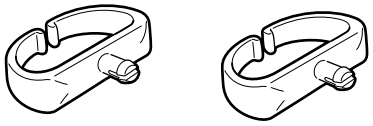
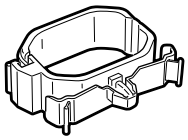
Cable clamp (×2)	**Cable clamp**	**Operation manual**
		
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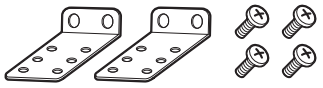
Safety restraints		
 Restraining brackets Screws for brackets Clamps Screws for clamps		
Page 8		

NOTE

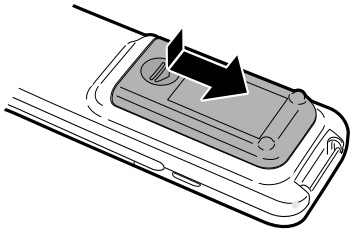
- Always use the AC cord supplied with the TV.
- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.
- The illustrations used throughout this manual are based on LC-46GD7X.

Preparation

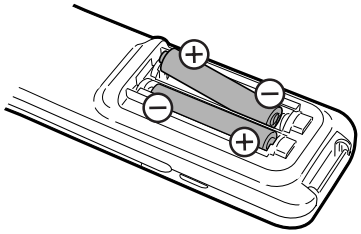
Inserting the batteries

Before using the TV for the first time, insert two “AAA” size batteries (supplied). When the batteries become depleted and the remote control fails to operate, replace the batteries with new “AAA” size batteries.

1 Open the battery cover.

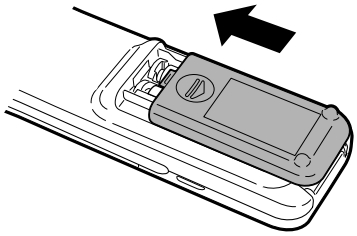


2 Insert two supplied “AAA” size batteries.



- Place batteries with their terminals corresponding to the (+) and (–) indications in the battery compartment.

3 Close the battery cover.



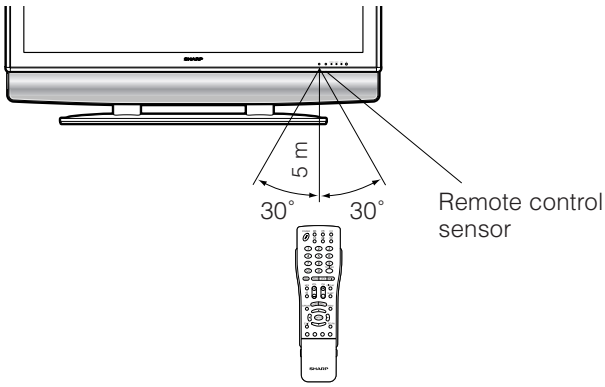
CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

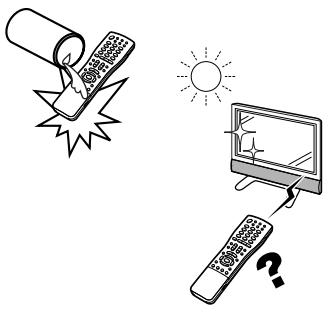
Using the remote control unit

Use the remote control unit by pointing it towards the remote sensor window.
Objects between the remote control unit and sensor window may prevent proper operation.



Cautions regarding remote control unit

- Do not subject the remote control unit to shock.
  In addition, do not soak the remote control unit with liquids, or place it in an area with high humidity.
- Do not install or place the remote control unit under direct sunlight.
  The heat may cause deformation of the unit.
- The remote control unit may not work properly if the remote sensor window of the TV is under direct sunlight or strong lighting. In such case, change the angle of the lighting or TV, or operate the remote control unit closer to the remote sensor window.



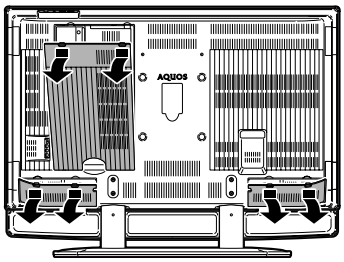
Setting the TV

Notes on installing the TV

- Avoid direct sunlight and place the TV in a well-ventilated location.
- Place the TV in a level location.

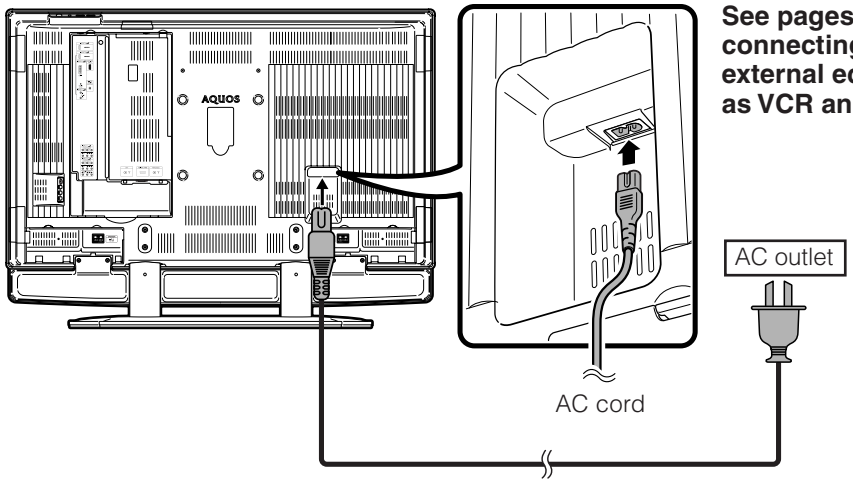
1 Removing the terminal cover

TV (rear view)



Press down the hooks to remove the cover toward you.

2 Connecting the AC cord, antenna, and external equipment to the TV

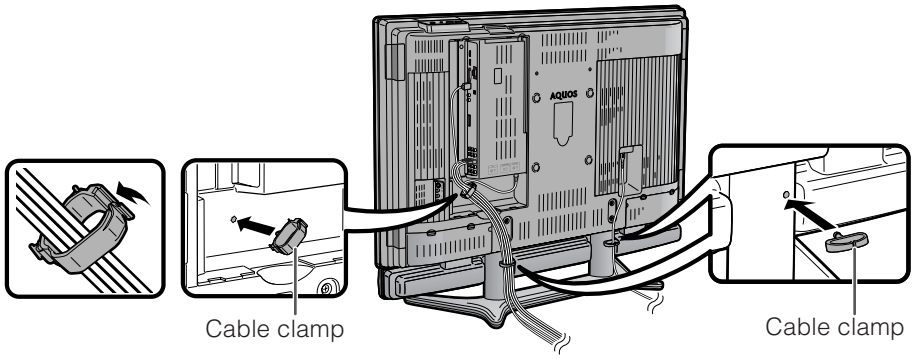


See pages 9 to 11 for connecting antennas and external equipment, such as VCR and DVD player.

- Place the TV close to the AC outlet, and keep the power plug within reach.

3 Bundling the cables and closing the terminal cover

Insert the cable clamps in the hole on the TV as shown.



Setting the TV on the wall

- You can mount the TV on the wall, using the optional AN-37AG2/AN-52AG1 bracket.
- For details, refer to the instructions supplied with the optional bracket.

CAUTION

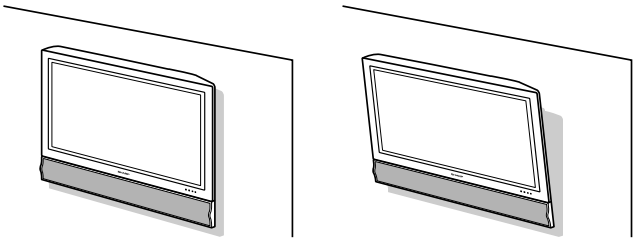
- **This TV should be mounted on the wall only with the AN-37AG2/AN-52AG1 (SHARP) wall mount bracket. The use of other wall mount brackets may result in an unstable installation and may cause serious injuries.**
- **Installing the Liquid Crystal Television requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.**

Using an optional bracket to mount the TV

- You can ask a qualified service personnel about using an optional AN-37AG2/AN-52AG1 bracket to mount the TV to the wall.
- Carefully read the instructions that come with the bracket before beginning work.

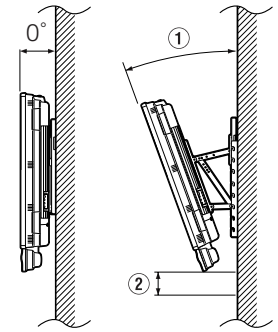
Hanging on the wall

AN-37AG2/AN-52AG1 wall mount bracket.
(See the bracket instructions for details.)



Vertical mounting　　Angular mounting

About setting the TV angle and height adjustment



For AN-52AG1

① 0°/5°/10°/15°/20° for LC-46GD7X (0°/5°/10°/15° for LC-52GD7X)
② -5/0/+5 cm (can be moved 5 cm up or down)

NOTE

- Detach the cable clamps on the rear of the TV when using the optional mount bracket.

Removing the stand

For wall mounting with the optional bracket, remove the stand.

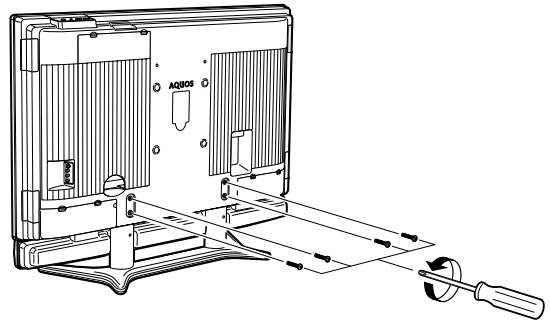
Before attaching/detaching the stand

- Before detaching (or attaching) the stand, unplug the AC cord from the AC outlet.
- Remove all terminal covers and connected cables.
- Make sure two or more people perform the operation.

CAUTION

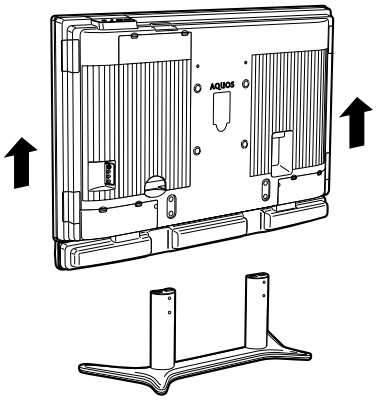
- **Do not remove the stand from the TV unless using an optional bracket to mount it.**

1



Unfasten the four screws used to secure the stand in place.

2



Detach the stand from the TV.
(Hold the stand so it will not drop from the edge of the base area.)

NOTE

- To attach the stand, perform the above steps in reverse order.

Protection against overturning

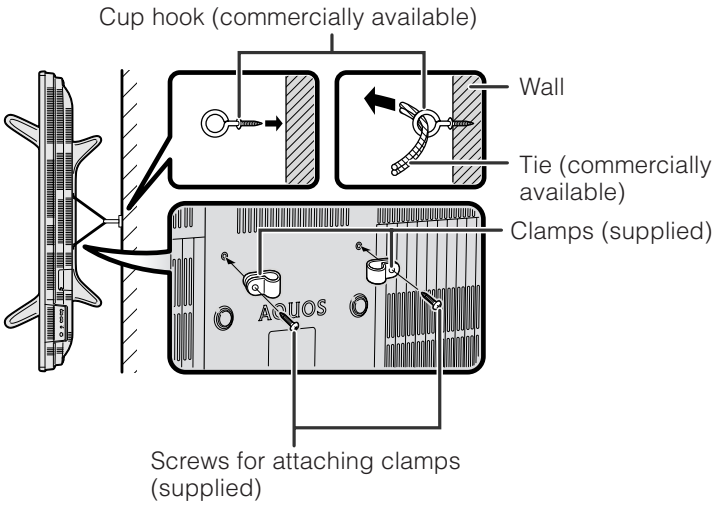
There is a danger of the product overturning in the case of a disaster or sudden collision. Carry out the following tip-resistant measurement for your safety.

Anchoring the TV to the wall or a pillar

1 Fix the product with the 2 clamps (supplied), using the screws (supplied).

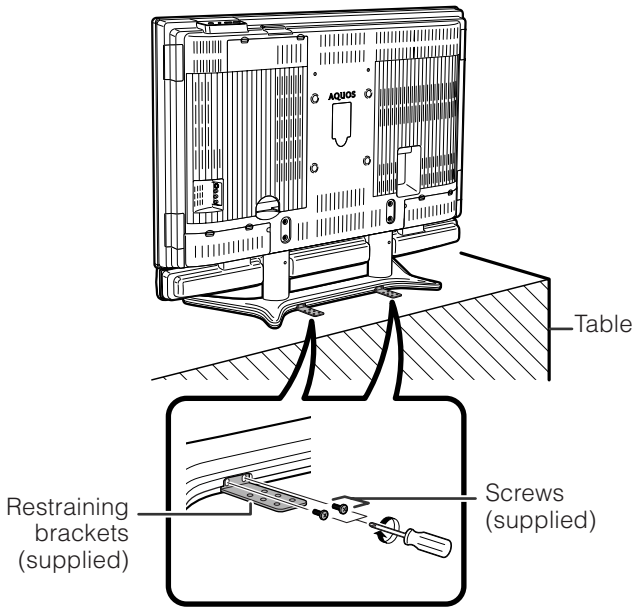
2 Fix the TV to the wall using extra strong ties (commercially available).

View from the top



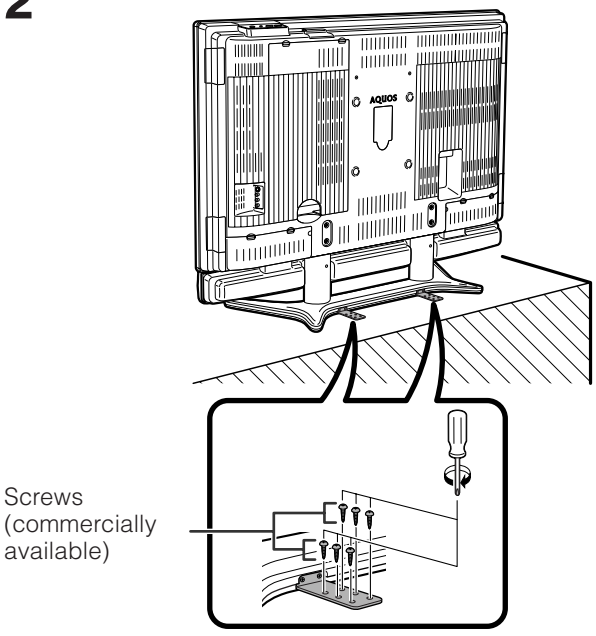
Fixing the TV to the table

1



Place the TV onto a table. Attach the two supplied restraining brackets to the stand with the four supplied screws.

2



Insert commercially available screws in the holes of the restraining brackets from the top and tighten the screws to secure the TV to the table.

- Use commercially available screws of the proper size to firmly secure the TV.

CAUTION

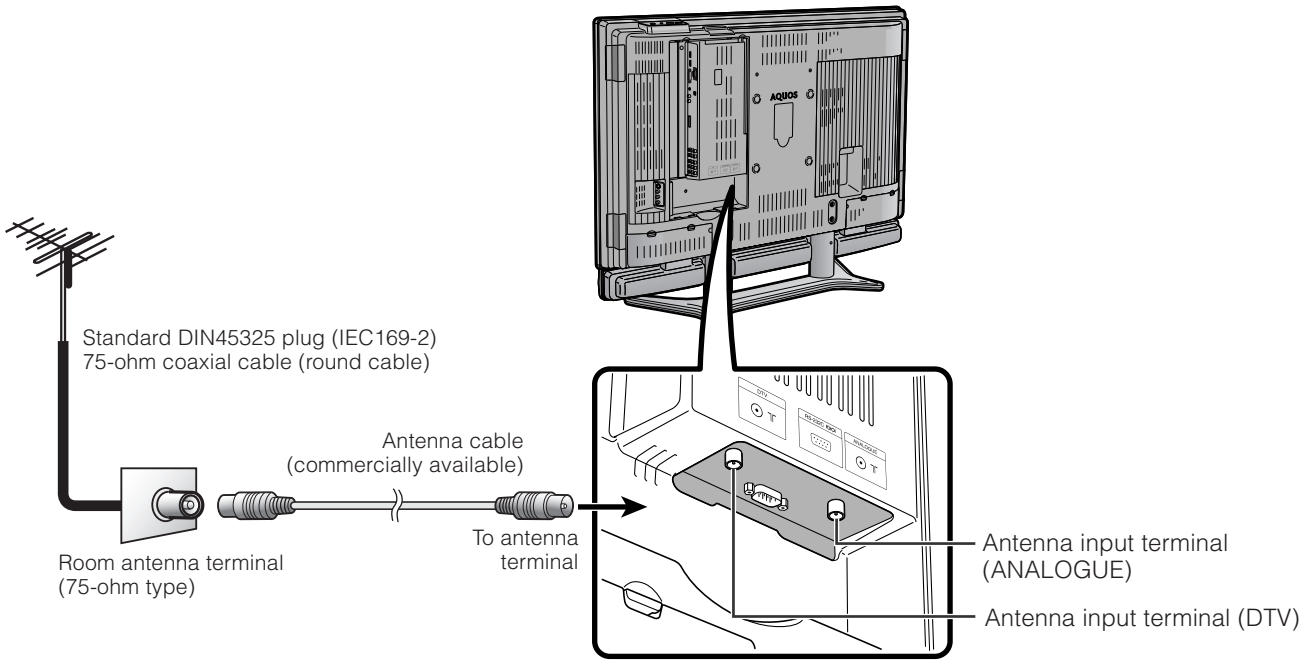
- **As this product is heavy, use a table that is wide enough to support the product and capable of withstanding the product's weight. The table should be set where it will not be overturned.**
- Be sure to use at least two people when moving the TV.

Simple operations for watching a TV programme

Basic connection

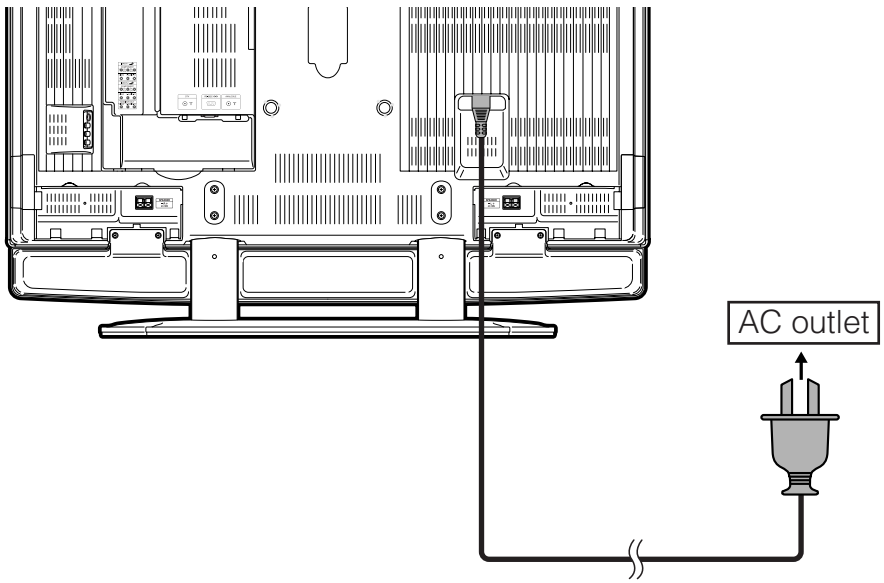
Connecting to an antenna

To enjoy a clearer picture, use an outdoor antenna. The following is a brief explanation of the types of connections that are used for coaxial cable.



Connecting to the AC outlet

Rear view



NOTE

- Always turn off the power of the TV when connecting the AC cord.
- Disconnect the AC cord from the AC outlet if the TV will not be used for a long period of time.

You can connect many types of external equipment to your TV, like a VCR, DVD player, HDTV tuner, game console and camcorder. To view external source images, select the input source from **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.

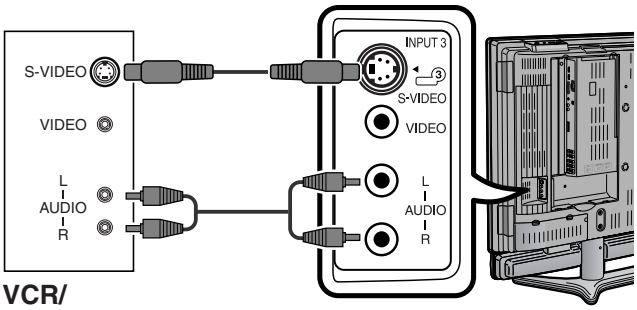
CAUTION

- To protect all equipment, always turn off the TV before connecting to a VCR, DVD player, HDTV tuner, game console, camcorder or other external equipment.
- Please refer to the relevant operation manual (VCR, DVD player, etc.) carefully before making connections.

Connecting a VCR, game console or camcorder

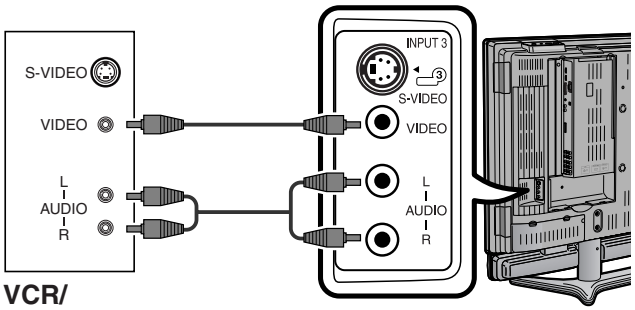
A VCR, game console, camcorder and some other audiovisual equipment can be conveniently connected using the INPUT 3 terminals.

When using S-VIDEO cable (commercially available).



VCR/ Game console/ Camcorder

When using composite cable (commercially available).



VCR/ Game console/ Camcorder

NOTE

- When the S-video terminal and video terminals are both used, the S-video input takes priority over the video terminals only when “Auto” is selected in “Input Select” setting.
- You can also connect the game console to INPUT 1 or 2 terminals to enjoy clearer picture.

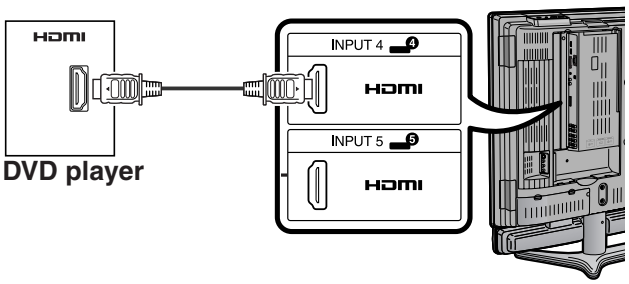
Connecting a DVD player

You can use the INPUT 1/INPUT 2 (component) or INPUT 4/INPUT 5 (HDMI) terminal when connecting to a DVD player and other audiovisual equipment.

NOTE

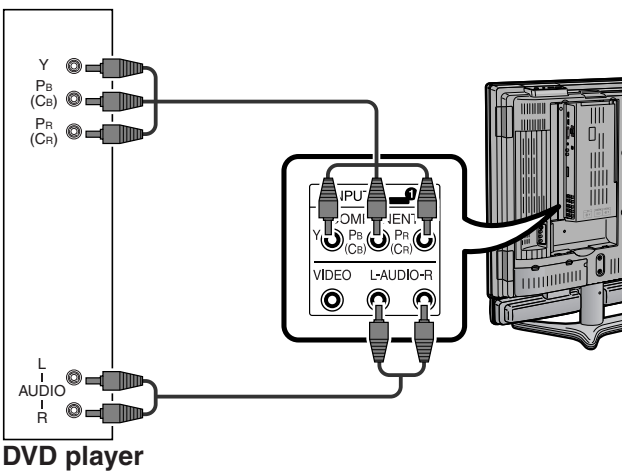
- When using a DVI-HDMI conversion adaptor, input the Audio Signal from the AUDIO terminal of INPUT 5.
- When using component cable, select “COMPONENT” for “Input Select” in the menu.

When using HDMI cable (commercially available).



DVD player

When using component cable (commercially available).



DVD player

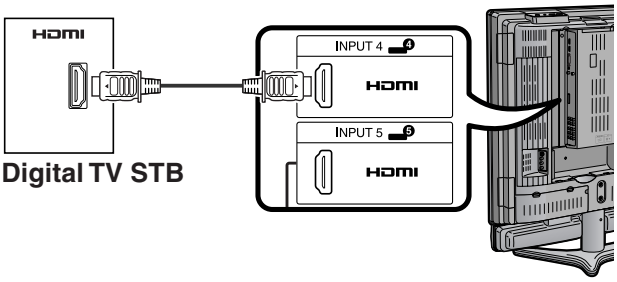
Connecting a Digital TV STB (Set Top Box)

You can use the INPUT 1/INPUT 2 (component) or INPUT 4/INPUT 5 (HDMI) terminal when connecting to a Digital TV STB and other audiovisual equipment.

NOTE

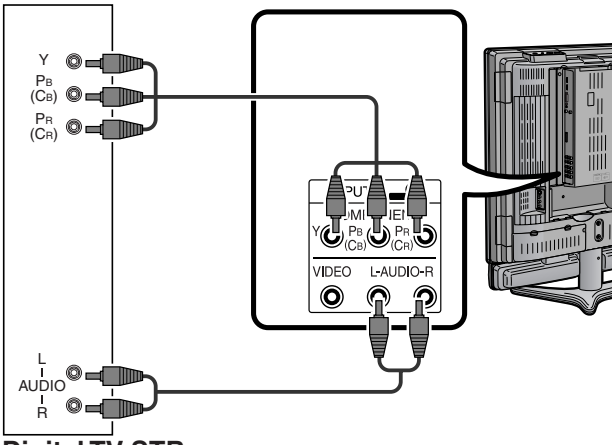
- When using a DVI-HDMI conversion adaptor, input the Audio Signal from the AUDIO terminal of INPUT 5.
- When using component cable, select “COMPONENT” for “Input Select” in the menu.

When using HDMI cable (commercially available).



Digital TV STB

When using component cable (commercially available).

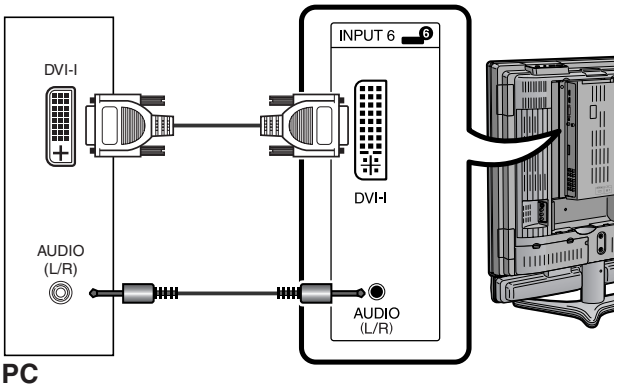


Digital TV STB

Connecting a PC

You can use the INPUT 6 (DVI) terminal when connecting to a PC.

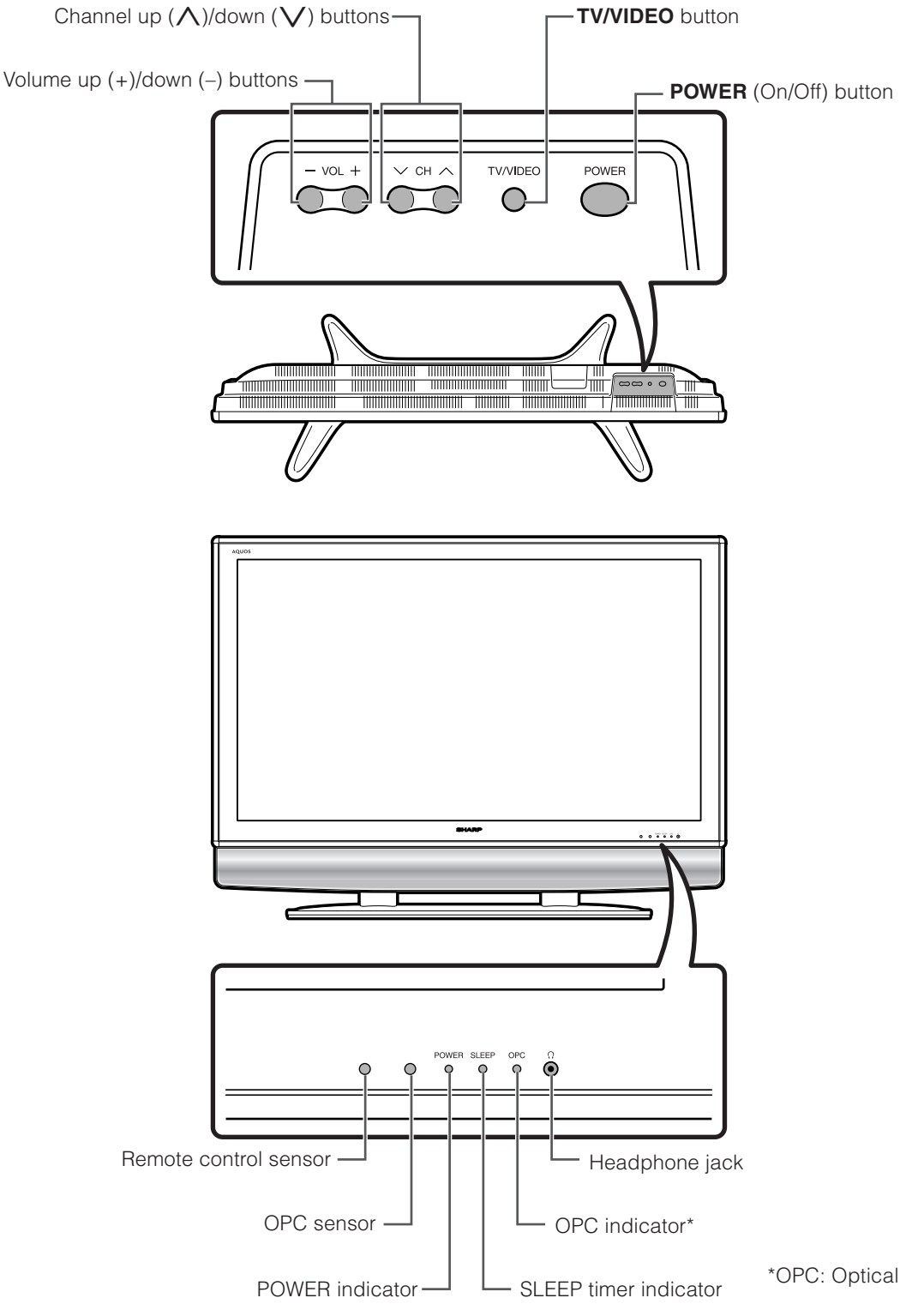
When using DVI cable (commercially available).



PC

Part names

TV (Front)



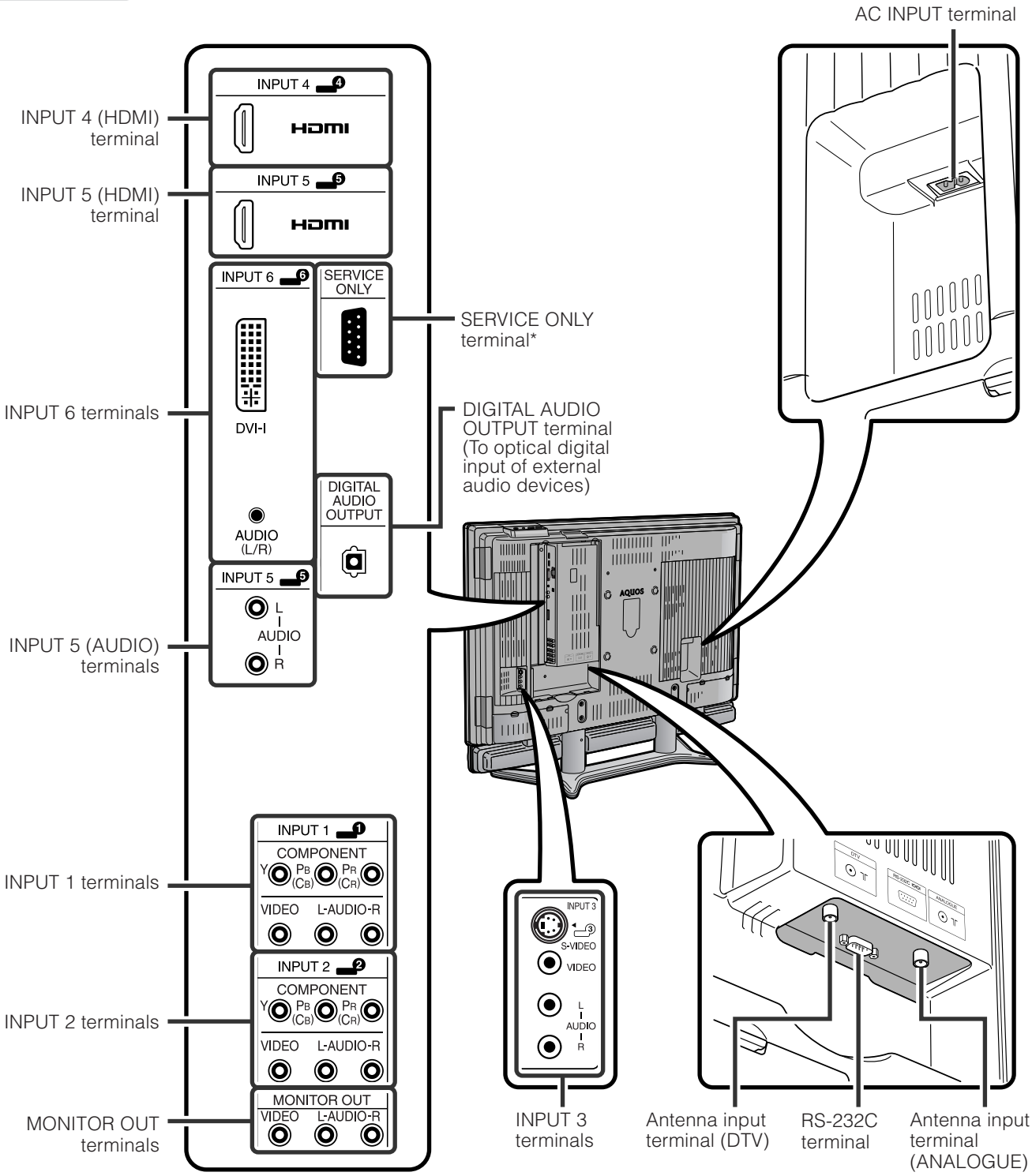
*OPC: Optical Picture Control
(See page 26.)

Regarding the headphone jack

- Use headphones with a stereo mini plug (Ø 3.5 mm).
- Be sure to unplug headphones from the jack when they are not in use.
- The speakers do not output volume when headphones are plugged in.
- Audio adjustments (page 30) do not affect the audio of connected headphones.
- You can set the volume to different levels for each input source.

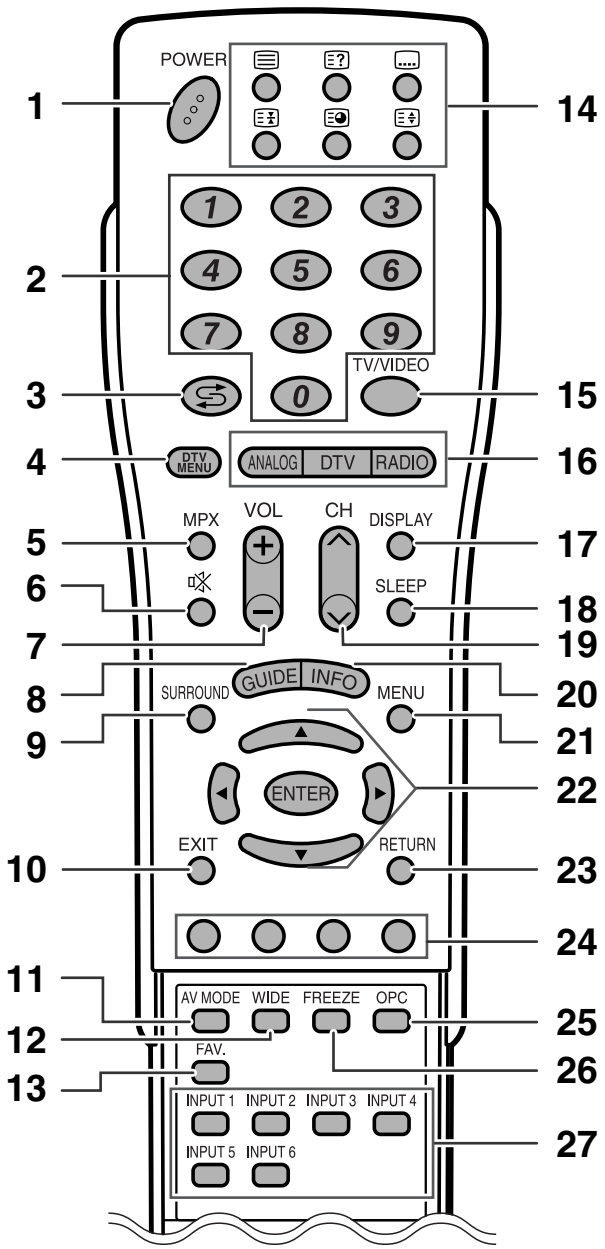
Volume display when headphones are plugged in

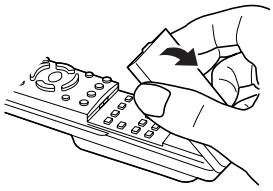
TV (Rear)



*Usually do not connect anything to this terminal as it is reserved only for service personnel.

Remote control unit





NOTE

- When using the remote control unit, point it at the TV.

1 **POWER (STANDBY/ON)**
To switch the power on and off. (See page 15.)

2 **0–9**
TV/DTV/External input mode: Set the channel. (See page 15.)
TELETEXT mode: Set the page. (See pages 15, 52 and 53.)

3 **(Flashback)**
Press to return to the previous image in normal viewing mode. (See page 16.)

4 **DTV MENU**
DTV mode: Display DTV Menu screen. (See page 32.)

5 **MPX**
Select the sound multiplex mode. (See page 16.)

6 **(Mute)**
Mute the sound. (See page 17.)

7 **VOL + /VOL –**
Set the volume. (See page 17.)

8 **GUIDE**
DTV mode: Display the programme list. (See page 33.)

9 **SURROUND**
Select Surround settings. (See page 30.)

10 **EXIT**
Turn off the On Screen Display.

11 **AV MODE**
Select a video setting. (See page 26.)

12 **WIDE**
Change the wide image mode. (See pages 46 and 47.)

13 **FAV.**
DTV mode: Display the favourite programme list. (See page 33.)

14 **(TELETEXT)**
ANALOGUE mode: Select the TELETEXT mode. (all TV image, all TEXT image, TV/TEXT image) (See pages 52 and 53.)
DTV mode: Select the TELETEXT mode. (all TV image, TEXT image)
(Reveal hidden for TELETEXT)
TELETEXT mode: Display hidden characters. (See page 52.)
(SUBTITLE for TELETEXT)
TV/INPUT mode: To turn the subtitles on and off. (See page 53.)
(Hold)
TELETEXT mode: Stop updating Teletext pages automatically. Press again to release the hold mode. (See pages 52 and 53.)
(Subpage)
TELETEXT mode: Display the Teletext subpage directly. (See page 53.)
(Top/Bottom/Full)
TELETEXT mode: Set the area of magnification. (See page 52.)

15 **TV/VIDEO (INPUT SOURCE)**
Select an input source.
(TV, DTV, INPUT1, INPUT2, INPUT3, INPUT4, INPUT5, INPUT6) (See pages 10, 43 and 50.)

16 **ANALOG**
To display analogue screen. (See page 18.)
DTV
Press to access DTV mode while watching other input sources, and vice versa. (See page 18.)
RADIO
Press to access RADIO mode. (See page 18.)

17 **DISPLAY**
Display the programme information.

18 **SLEEP**
Set the Sleep timer. (See page 17.)

19 **CH∧/CH∨**
TV/DTV input mode: Select the channel. (See page 15.)
TELETEXT mode: Select the page. (See pages 52 and 53.)

20 **INFO**
DTV mode: Display the information plate screen. (See page 33.)

21 **MENU**
Display the menu screen. (See page 19.)

22 **▲/▼/◀/▶ (Cursor)**
Select a desired item on the setting screen. (See pages 19 and 32.)
ENTER
Execute a command. (See pages 19 and 32.)

23 **RETURN**
MENU mode: Return to the previous menu screen. (See pages 19 and 32.)

24 **Colour (Red/Green/Yellow/Blue)**
TELETEXT mode: Select a page. (See page 52.)

25 **OPC**
To switch the OPC function on and off. (See page 26.)

26 **FREEZE**
Freeze a motion picture on the screen. (See page 51.)

27 **INPUT1/INPUT2/INPUT3/INPUT4/INPUT5/INPUT6**
Directly select and output the signal from the INPUT1 to INPUT6 terminal.

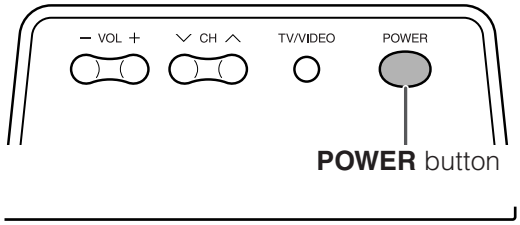
Watching TV

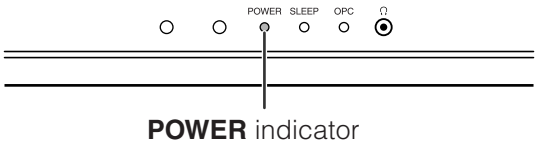
Turning on the power

Press **POWER** on the TV.

- POWER indicator (Green): The TV is on. (After a few seconds, an image appears with sound.)

- After turning the power "ON" by pressing **POWER** on the TV, you can turn the power ON/OFF by pressing **POWER** on the remote control.





Turning off the power

Press **POWER** on the remote control.

- The TV enters standby mode and the image on the screen disappears.
- The POWER indicator on the TV changes from green to red.

Press **POWER** on the TV.

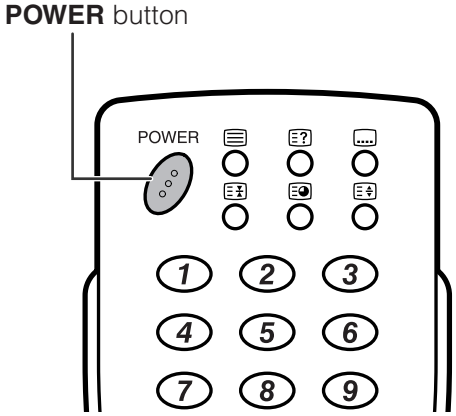
- The POWER indicator on the TV turns off.
- When the TV is turned off by **POWER** on the TV, you cannot turn on the power by pressing **POWER** on the remote control.

POWER indicator

Off	Power off
Red	The TV is in standby mode.
Green	The TV is on.

NOTE

- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the AC outlet.
- Minor power is consumed when the TV is turned off by **POWER** on the TV or when the TV is in standby mode.

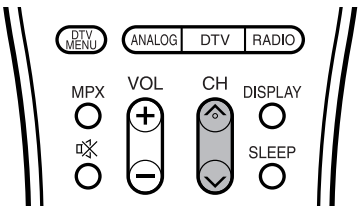


Simple button operations for changing channels

You can change channels in several ways.

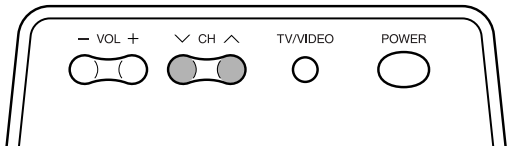
Using CH∧/∨ on the remote control unit

- Press **CH**∧ to increase the channel number.
- Press **CH**∨ to decrease the channel number.



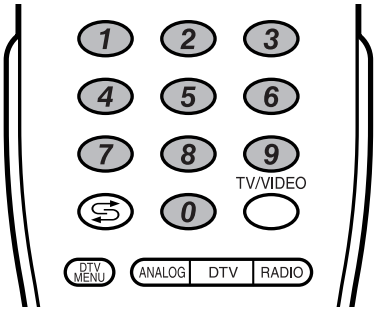
NOTE

- **CH**∧/∨ on the TV operates the same as **CH**∧/∨ on the remote control unit.



Using 0 – 9 on the remote control unit

Select the channels directly by pressing buttons **0** to **9**.



EXAMPLE

To select a 1-digit channel (e.g. channel 2):

- Press **0**, followed by **2**.

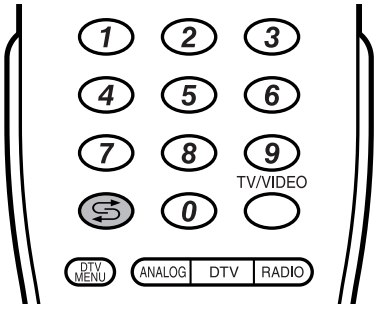
To select a 2-digit channel (e.g. channel 12):

- Press **1**, followed by **2**.

When viewing Teletext information

View a page directly which is 3-digit page number from 100 to 899 by pressing buttons **0** to **9**.

Using Flashback (⇆) on the remote control unit

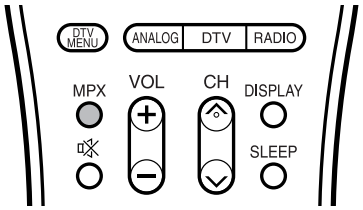


Press ⇆ to switch the currently tuned channel to the previously tuned channel.
Press ⇆ again to switch back to the currently tuned channel.

Press ⇆ to toggle between the currently selected input source and the previously selected one.

Press ⇆ to return to the previous page in TELETEXT mode.

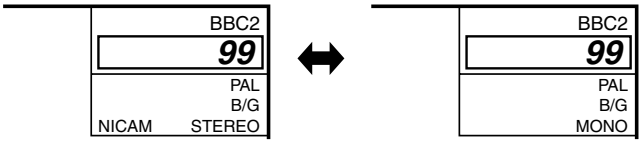
Using MPX on the remote control unit



In the NICAM TV broadcasts

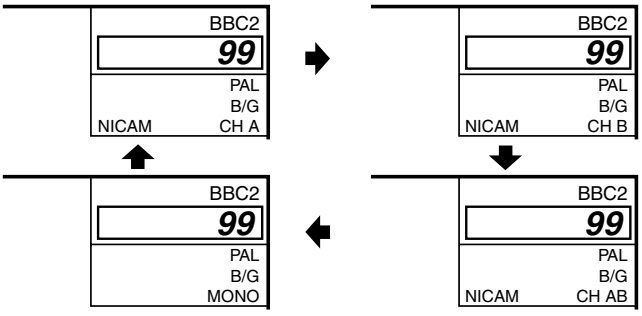
When receiving a stereo signal
Each time you press **MPX**, the mode switches between NICAM STEREO and MONO.

Stereo mode



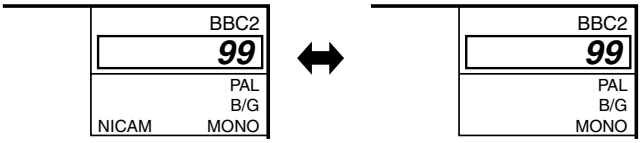
When receiving a bilingual signal
Each time you press **MPX**, the mode switches among NICAM CH A, NICAM CH B, NICAM CH AB and MONO.

Bilingual mode



When receiving a monaural signal
Each time you press **MPX**, the mode switches between NICAM MONO and MONO.

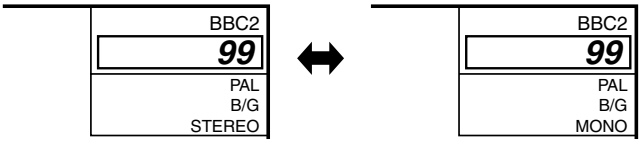
Monaural mode



In the TV mode of A2 TV broadcasts

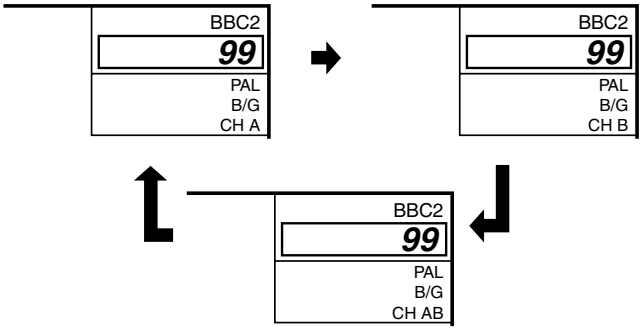
When receiving a stereo signal
Each time you press **MPX**, the mode switches between STEREO and MONO.

Stereo mode



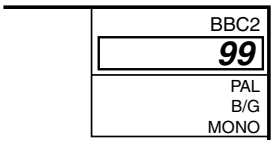
When receiving a bilingual signal
Each time you press **MPX**, the mode switches among CH A, CH B and CH AB.

Bilingual mode



When receiving a monaural signal
When you press **MPX**, “MONO” displays.

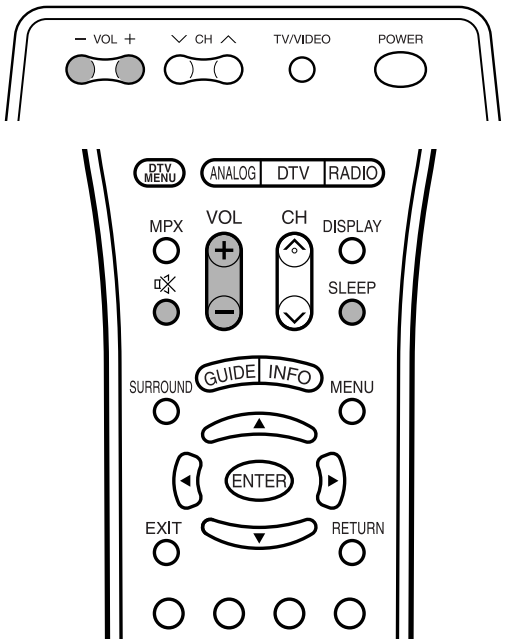
Monaural mode



NOTE

- “BBC2”, “99” and “PAL” are tentative network name, channel and colour system.

Simple button operation for changing volume/sound



Changing the volume

You can change the volume on the TV or on the remote control unit.

- To increase the volume, press **VOL +**.
- To decrease the volume, press **VOL –**.

NOTE

- "TV", "DTV", "INPUT1", "INPUT2", "INPUT3", "INPUT4", "INPUT5 and "INPUT6" modes can store volume adjustment values separately.

Using Mute (🔇) on the remote control unit

🔇 mutes the current sound output.

1 Press 🔇.

- The sound is silenced.
- "🔇" has been displayed on the screen for 30 minutes.

Mute

NOTE

- Within 30 minutes after pressing 🔇, press one of the buttons below to cancel the mute.
  —**VOL –**/**VOL +**
  —🔇
- **Mute will be cancelled after 30 minutes. However, the TV will not suddenly output loud sound as the volume level will be set to 0 automatically. Increase the volume level by pressing VOL +.**

2 Press 🔇 again within 30 minutes to cancel the mute.

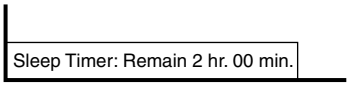
- Before 30 minutes, the volume level returns to the previous setting.

Sleep timer

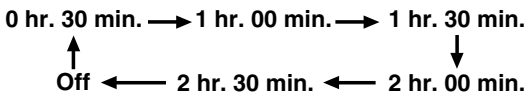
Allows you to set a time when the TV automatically switches to standby.

1 Press **SLEEP**.

- Remaining time displays when sleep timer has been set.



2 Each time you press **SLEEP**, the remaining time switches as shown below.

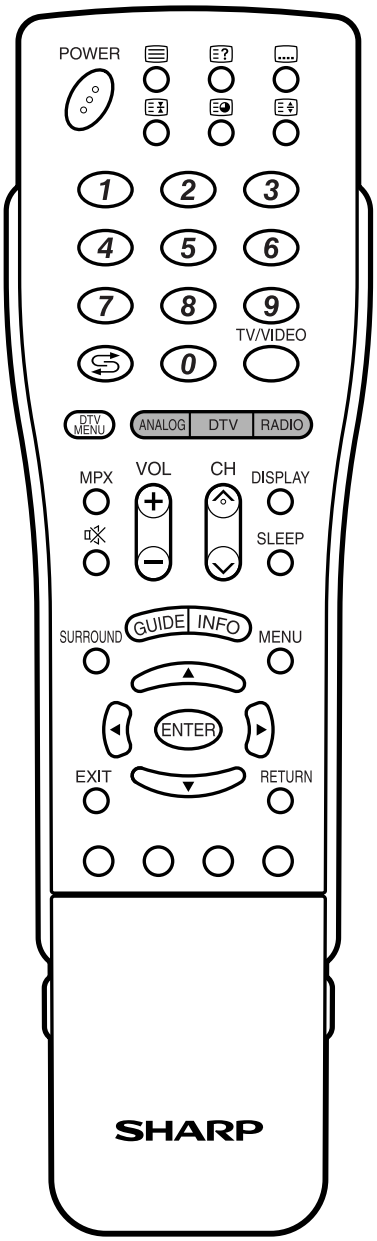


NOTE

- The sleep timer indicator on the TV lights up when the time has been set.
- When the time has been set, countdown automatically starts.
- Five minutes before the preset of time expires, the remaining time displays each minute.
- Select "Off" by pressing **SLEEP** to cancel the sleep timer.

ANALOG/DTV/RADIO buttons

Use the following buttons on the remote control to operate the menu.



ANALOG: Press to switch to analogue mode. After switching from DTV, radio or external input mode to analogue mode, the TV jumps to the most recently viewed analogue channel.

DTV: Press to switch to DTV mode. After switching from analogue, radio or external input mode to DTV mode, the TV jumps to the most recently viewed DTV channel.

RADIO: Press to switch to radio mode. After switching from analogue, DTV or external input mode to radio mode, the TV jumps to the most recently tuned radio channel.

When you watch the TV for the first time

When the TV powers on for the first time after purchase, perform the auto installation.

Analogue TV

You can run the auto installation to set channels automatically.

1 To watch the analogue TV, select “Auto Installation” from Setup menu. (See page 21.)

2 After setting the channels, you can select a channel using **CH** ∧/∨ or **0-9** on the remote control unit. (See page 15.)

DTV

When the TV accesses to DTV mode for the first time, you need to run the auto search. To scan all available services in your area, follow the procedures below.

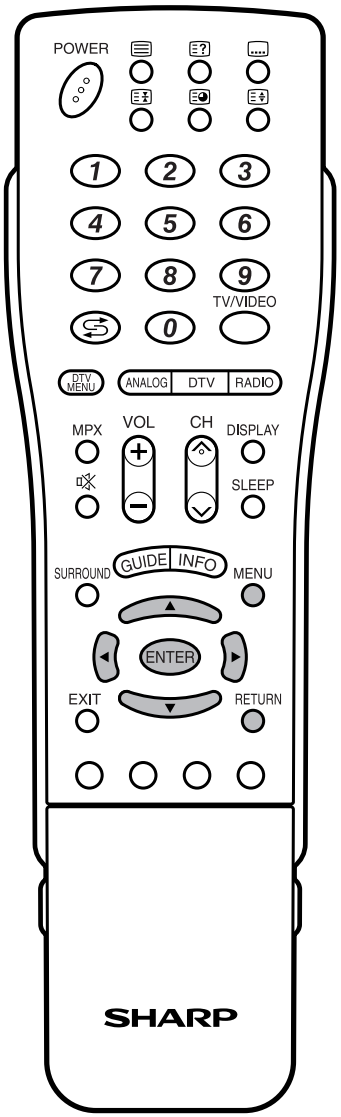
1 To watch DTV broadcasts, select “Auto Search” from Installation menu. (See page 35.)

2 After setting the channels, you can select a channel using **CH** ∧/∨ or **0-9** on the remote control unit. (See page 15.)

Basic adjustment settings

Menu operation buttons

Use the following buttons on the remote control to operate the menu.

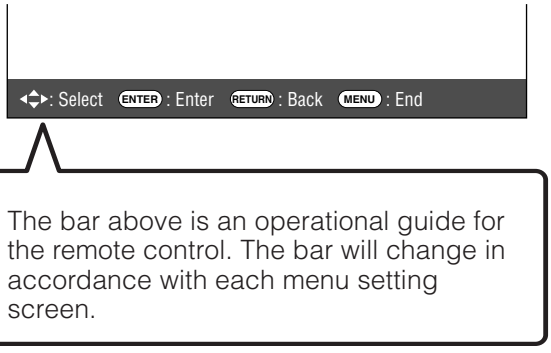


MENU: Press to open or close the menu screen.

▲/▼/◀/▶: Press to select a desired item on the screen or adjust a selected item.

ENTER: Press to go to the next step or complete the setting.

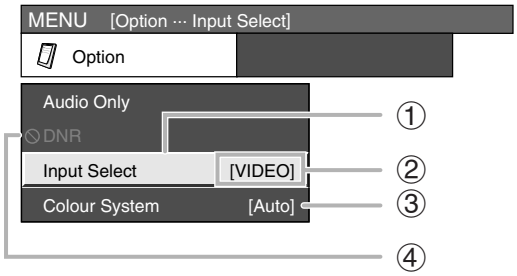
RETURN: Press to return to the previous step.



The bar above is an operational guide for the remote control. The bar will change in accordance with each menu setting screen.

On-Screen Display

(Example)



① Item displayed in yellow
- This indicates the item currently selected.
- Press **ENTER** to go to the adjustment screen for this item.

② Item in brackets
- This indicates the current setting for the item.

③ Item displayed in white
- This indicates an item can be selected.

④ Item displayed in grey
- This indicates that the item cannot be selected.

  *There are various reasons why items cannot be selected, but the main reasons are as follows:

  1. Nothing is connected to the selected input terminal.
  2. The function is not compatible with the current input signal.

NOTE

- Menu options differ in the selected input modes, but the operating procedures are the same.
- The screens in the operation manual are for explanation purposes (some are enlarged, others cropped) and may vary slightly from the actual screens.

Menu items (TV/DTV/INPUT1-3)

List of menu items to help you with operations

Picture

OPC ..... Page 26
Backlight ..... Page 27
Contrast ..... Page 27
Brightness ..... Page 27
Colour ..... Page 27
Tint ..... Page 27
Sharpness ..... Page 27
Advanced
- Colour Temp. ..... Page 28
- Black ..... Page 28
- Quick shoot ..... Page 28
- 3D-Y/C ..... Page 28
- Monochrome ..... Page 29
- Film Mode ..... Page 29
- Range of OPC ..... Page 29

Audio

Treble ..... Page 30
Bass ..... Page 30
Balance ..... Page 30
Surround ..... Page 30

Power Control

No Signal Off ..... Page 31
No Operation Off ..... Page 31

Setup

Auto Installation ..... Page 21
Programme Setup ..... Pages 21-25
Child Lock ..... Page 39
Speaker Setup ..... Page 40
Input Skip ..... Page 41
Input Label ..... Page 43
Position ..... Page 43
WSS ..... Page 44
4:3 Mode ..... Page 44
Standby mode ..... Page 45
Language ..... Page 49
Text Language ..... Page 51
Identification ..... Page 49
Reset ..... Page 45

Option

Audio Only ..... Page 48
DNR ..... Page 48
Input Select ..... Page 50
Colour System ..... Page 49

Menu items (HDMI/DVI)

List of menu items to help you with operations

Picture

OPC ..... Page 26
Backlight ..... Page 27
Contrast ..... Page 27
Brightness ..... Page 27
Colour ..... Page 27
Tint ..... Page 27
Sharpness ..... Page 27
Advanced
- Colour Temp. ..... Page 28
- Black ..... Page 28
- Quick shoot ..... Page 28
- Monochrome ..... Page 29
- Film Mode ..... Page 29
- Range of OPC ..... Page 29

Audio

Treble ..... Page 30
Bass ..... Page 30
Balance ..... Page 30
Surround ..... Page 30

Power Control

No Signal Off ..... Page 31
No Operation Off ..... Page 31

Setup

Speaker Setup ..... Page 40
Input Skip ..... Page 41
Input Signal ..... Page 41
Auto Sync. ..... Page 42
Input Label ..... Page 43
Fine Sync. ..... Page 42
Position ..... Page 43
Standby mode ..... Page 45
Language ..... Page 49
Reset ..... Page 45

Option

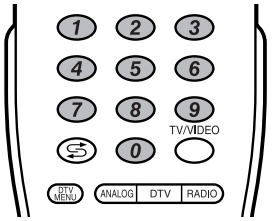
Audio Only ..... Page 48
DNR ..... Page 48
Input Select ..... Page 50
HDMI Setup ..... Page 48

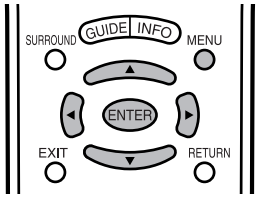
NOTE

- Some menu items may not be displayed depending on the selected input source.

Auto installation

You can run auto installation again, even after setting up the preset channels.

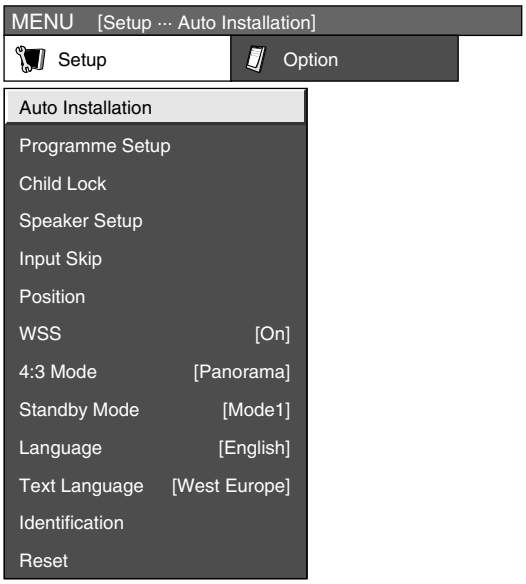




1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Auto Installation”, and then press **ENTER**.



4 If you have already set the password, enter it here. If not, enter the factory preset password “1234”.

• See page 39 for setting a password.

– – – –

5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**. After this setting, auto search starts with the following order.

① Programme auto search
② Auto labelling
③ Auto sorting

You do not need to do anything during the auto search.

NOTE

- After performing step 6, the menu screen shown in step 3 will reappear. Do not turn off the TV before then, because the TV is saving the data found.

Programme setup

You can run the auto search procedure again at any time by accessing the Setup menu and Programme Setup. Channels can be tuned automatically or manually.

Auto search

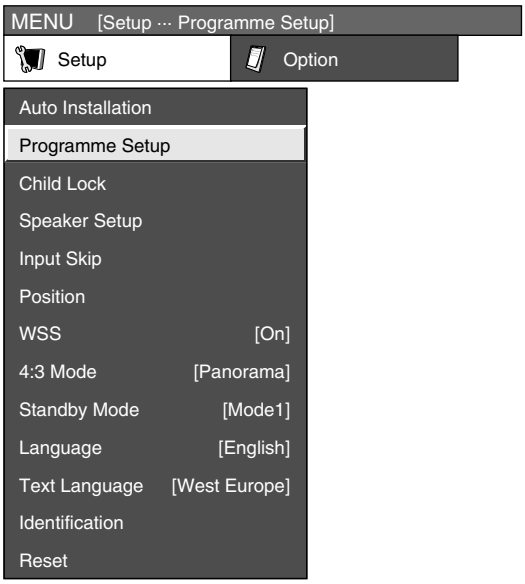
You can also automatically search by performing the procedure below. This is the same function as programme auto search in auto installation.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you have already set the password, enter it here. If not, enter the factory preset password “1234”.

• See page 39 for setting a password.



4 Press ▲/▼ to select “Auto Search”, and then press **ENTER**.

5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

- Auto search starts with the following order.
  ① Programme auto search
  ② Auto labelling
  ③ Auto sorting

NOTE

- After performing step 5, the menu screen shown in step 3 will reappear. Do not turn off the TV before then, because the TV is saving the data found.

Manual setting for each channel

You can set some channel items manually. They are Search, Fine (TV frequency), Colour sys., Sound sys., Label (Network name), Skip and Lock (Child Lock).

1 Press **MENU** and the MENU screen displays.

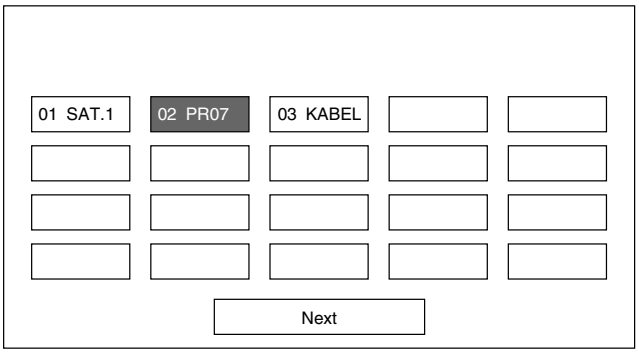
2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you have already set the password, enter it here. If not, enter the factory preset password “1234”.
• See page 39 for setting a password.

4 Press ▲/▼ to select “Manual Adjust”, and then press **ENTER**.

5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

Programme Setup “Manual Adjust” menu



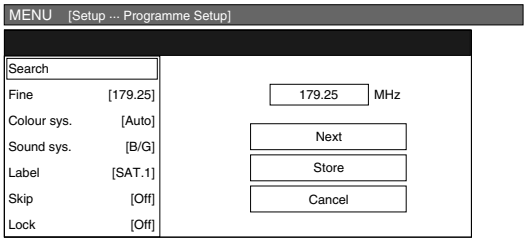
You can select one of the following settings.

① **Search** (See page 22.)
② **Fine** (See page 22.)
③ **Colour system** (See page 23.)
④ **Sound system** (See page 23.)
⑤ **Label** (See page 23.)
⑥ **Skip** (See page 24.)
⑦ **Lock** (See page 24.)

Search tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
• The selected channel information displays.

2 Press ▲/▼ to select “Search”, and then press **ENTER**.



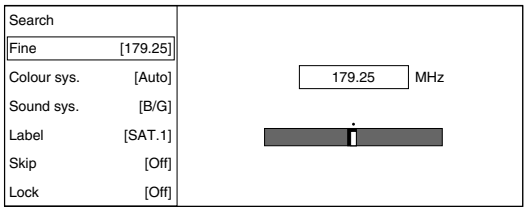
3 Press ▲/▼ to select item and press **ENTER**.
• **Next**: Search the next channel.
• **Store**: Memorise the current display channel.
• **Cancel**: Return to the previous screen. (The search result will not be stored.)

Fine tuning

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
• The selected channel information displays.

2 Press ▲/▼ to select “Fine”, and then press **ENTER**.

3 Press ◀/▶ to adjust the frequency, and then press **ENTER**.
• Adjust while checking the background picture as a reference.



• Instead of the method above, you can also set by directly entering the frequency number of the channel with **0** – **9**.
• When setting a frequency on the “Fine” screen, the last figure of the frequency needs to be “0” or “5”.

EXAMPLE
• 179.25 MHz: Press **1** → **7** → **9** → **2** → **5**.
• 49.25 MHz: Press **4** → **9** → **2** → **5** → **ENTER**.

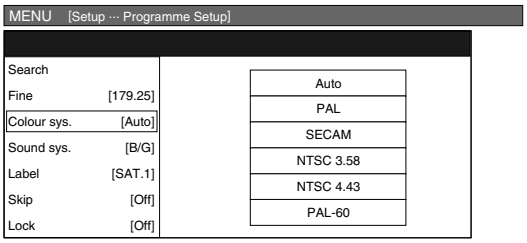
Manual setting for each channel (continued)

Colour system

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Colour sys.”, and then press **ENTER**.
- Receivable colour systems are listed.

Colour system menu



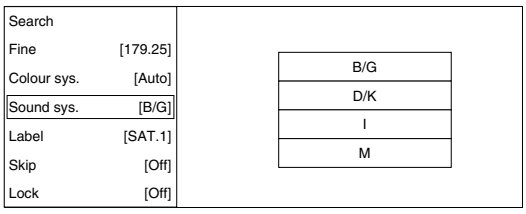
3 Press ▲/▼ to select the optimum colour system, and then press **ENTER**.

Sound system (Broadcasting system)

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Sound sys.”, and then press **ENTER**.
- Receivable sound systems (Broadcasting systems) are listed.

Sound system menu



3 Press ▲/▼ to select the optimum sound system, and then press **ENTER**.

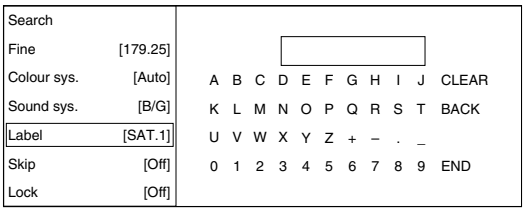
Labelling channels

When a TV channel sends its Network Name, the auto installation detects the information and assigns a name to it. However, you can change individual channel names.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information displays.

2 Press ▲/▼ to select “Label”, and then press **ENTER**.
- Alphabets and numbers are listed.

Labelling menu


Search
Fine [179.25]
Colour sys. [Auto]
Sound sys. [B/G]
Label [SAT.1]
Skip [Off]
Lock [Off]
A B C D E F G H I J CLEAR
K L M N O P Q R S T BACK
U V W X Y Z + – . _
0 1 2 3 4 5 6 7 8 9 END

3 Press ▲/▼/◀/▶ to select each character of the new name for the channel, and then press **ENTER**.

4 Repeat until the name is fully spelt out.
- The name can be 5 characters or less.
- When you want to set a channel name of less than 5 characters, select “END”, then press **ENTER** to exit from the labelling menu.

Manual setting for each channel (continued)

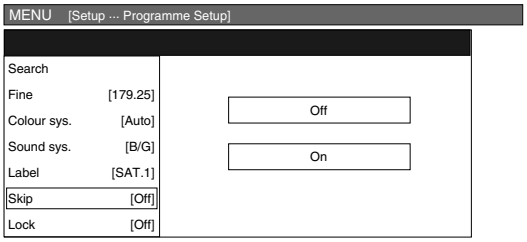
Skipping channels

Channels with “Skip” set to “On” are passed over when using **CH**∧/∨ even if selected while watching the image from the TV.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information will be displayed.

2 Press ▲/▼ to select “Skip”, and then press **ENTER**.
- Skip menu displays.

Skip menu



3 Press ▲/▼ to set “Skip” to “On”, and then press **ENTER**.

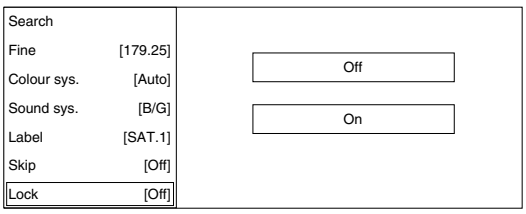
Setting the child lock

You can block the viewing of any channel.

1 Press ▲/▼/◀/▶ to select the channel you want to edit, and then press **ENTER**.
- The selected channel information will be displayed.

2 Press ▲/▼ to select “Lock”, and then press **ENTER**.
- Child lock menu will be displayed.

Lock menu



3 Press ▲/▼ to set “Lock” to “On”, and then press **ENTER**.

NOTE

- See page 39 for setting a password.
- If “Lock” is set to “On” for a channel, “Child lock has been activated.” is displayed when you select the channel, and the image and sound of the channel is blocked.
- When pressing **ENTER** while “Child lock has been activated.” is displayed, password input menu will be displayed. Inputting the correct password lifts the child lock temporarily until the power is turned off.

Sort

Channel positions can be sorted freely.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you already set the password, enter it here.
- See page 39 for setting a password.

4 Press ▲/▼ to select “Sort”, and then press **ENTER**.

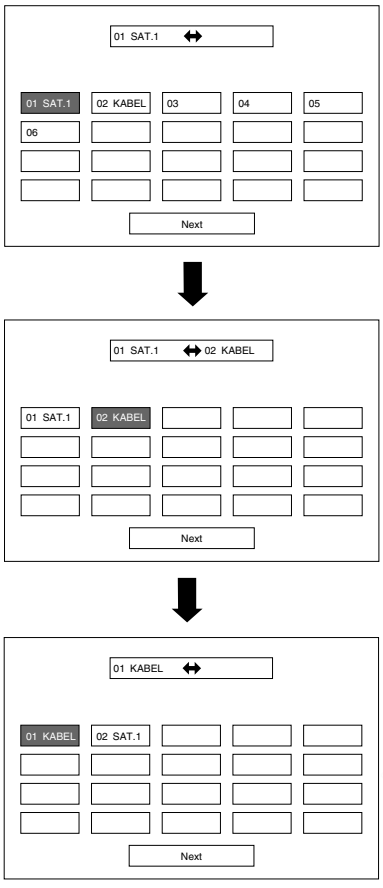
5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to move, and then press **ENTER**.

7 Move it to the desired position by pressing ▲/▼/◀/▶, and then press **ENTER**.

8 Repeat the steps 6 and 7 until all desired channels are sorted.

Sort menus



Erase Programme

The individual programme can be erased.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Programme Setup”, and then press **ENTER**.
If you already set the password, enter it here.
• See page 39 for setting a password.

4 Press ▲/▼ to select “Erase Programme”, and then press **ENTER**.

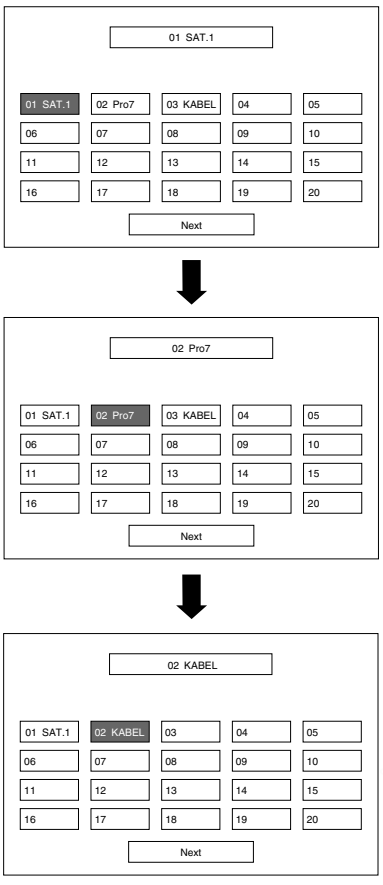
5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Press ▲/▼/◀/▶ to select the channel you want to erase, and then press **ENTER**.
• A message screen pops up.

7 Press ◀/▶ to select “Yes”, and then press **ENTER** to erase the selected programme. All the subsequent programmes move up.

8 Repeat the steps 6 and 7 until all desired channels are erased.

Erase programme menus



AV MODE selection

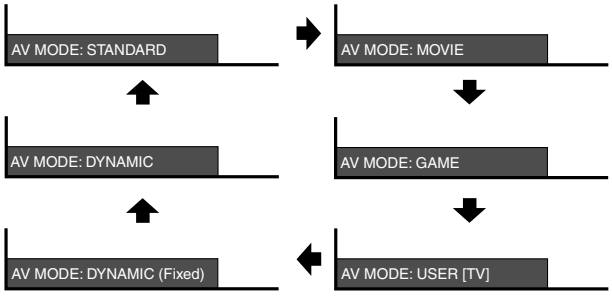
AV MODE gives you 7 viewing options to choose from to best match the system environment, which can vary due to factors like room-brightness, type of programme watched or the type of image input from external equipment.

Using AV MODE on the remote control unit

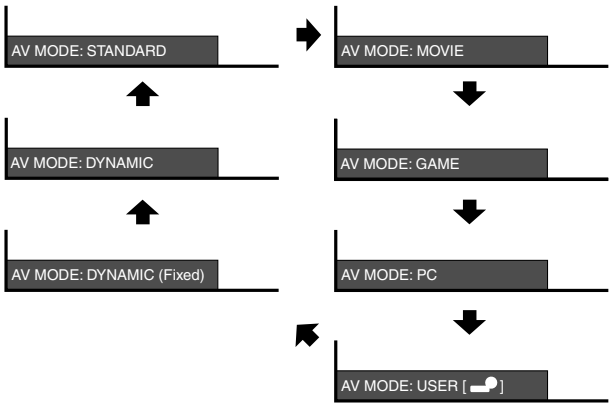
1 Press **AV MODE**.
- Present AV MODE displays.

2 Press **AV MODE** again before the mode displayed on the screen disappears.
- The mode changes as shown below.

When the input source is TV, INPUT1, 2 or 3 terminals (Example)



When the input source is INPUT4, 5 or 6 terminals (Example)



Selected item	Description
STANDARD	For a highly defined image in a normally bright room
MOVIE	For a movie
GAME	Lowers image brightness for easier viewing.
PC	For PC. (Available only when inputting an HDMI or DVI signal.)
USER	Allows the user to customise settings as desired. You can set the mode for each input source.
DYNAMIC (Fixed)	Changes the image and sound settings to the factory preset values. No adjustments are allowed.
DYNAMIC	For a clear-cut image emphasising high contrast for sports viewing

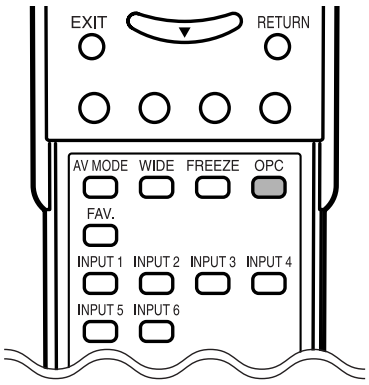
NOTE

- You can select a different AV MODE item for each input mode. (For example, select STANDARD for TV input and DYNAMIC for VIDEO input.)

OPC (Optical Picture Control) setting

You can set the TV to automatically adjust the screen to suitable backlight brightness according to the lighting conditions.

Using OPC on the remote control unit



Press **OPC** to switch the OPC function on and off.

Using OPC on the menu screen

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

3 Press ▲/▼ to select “OPC”.

4 Press ◀/▶ to select the desired item, and then press **ENTER**.

Selected item	Description
Off	The brightness is fixed at the value set in “Backlight” (See page 27).
On	Automatically adjusts
On: Display	Displays the OPC effect on the screen while adjusting the brightness of the screen.

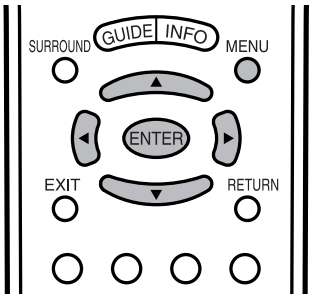
NOTE

- Make sure no object obstructs the OPC sensor, which could affect its ability to sense surrounding light.

Picture adjustments

You can adjust the picture to your preference.

Follow the steps to adjust the picture.



1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

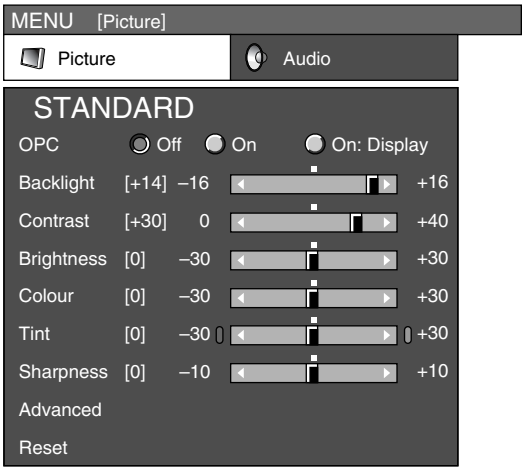
3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, press **ENTER**, press ◀/▶ to select “Yes”, and then press **ENTER**.

Adjustments items



Selected item	◀button	▶button
Backlight	The screen dims	The screen brightens
Contrast	For less contrast	For more contrast
Brightness	For less brightness	For more brightness
Colour	For less colour intensity	For more colour intensity
Tint	Skin tones become purplish	Skin tones become greenish
Sharpness	For less sharpness	For more sharpness

NOTE

- Select “Advanced” and then press **ENTER** to set “Colour Temp.”, “Black”, “Quick shoot”, “3D-Y/C”, “Monochrome”, “Film Mode” or “Range of OPC”. See pages 28 and 29.

Advanced

Advanced setting enables you to set the picture adjustment in more detail. There are seven options you can choose from.

Colour temperature

Adjusts the colour temperature to give the best white image.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Picture”.

3 Press ▲/▼ to select “Advanced”, and then press **ENTER**.

4 Press ▲/▼ to select “Colour Temp.”, and then press **ENTER**.

5 Press ▲/▼ to select the desired level, and then press **ENTER**.

Selected item	Description
High **Mid-High** **Middle** **Mid-Low** **Low**	White with bluish tone ⬍ White with reddish tone

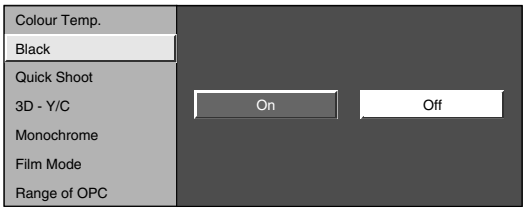
Black

For easier viewing, change the viewing depth by selecting a level for automatically adjusting the dark portion of an image.

1 Repeat steps 1 to 3 in **Colour temperature**.

2 Press ▲/▼ to select “Black”, and then press **ENTER**.

3 Press ◀/▶ to select “On”, and then press **ENTER**.



Selected item	Description
On	For high detail in black portions
Off	No adjustment

Quick Shoot

Use Quick Shoot to view fast-action video more clearly.

1 Repeat steps 1 to 3 in **Colour temperature**.

2 Press ▲/▼ to select “Quick Shoot”, and then press **ENTER**.

3 Press ◀/▶ to select “Advanced”, and then press **ENTER**.

Selected item	Description
Advanced	For obtaining a clear image
Standard	Normal image

NOTE

- Quick Shoot may cause image noise. If this occurs, set the function to “Standard”.
- Quick shoot is not selectable on 50Hz input signals, e.g. PAL 50Hz.

3D-Y/C

Provides high quality images with minimal dot crawl and cross colour noise.

1 Repeat steps 1 to 3 in **Colour temperature**.

2 Press ▲/▼ to select “3D-Y/C”, and then press **ENTER**.

3 Press ▲/▼ to select the desired level, and then press **ENTER**.

Selected item	Description
Standard	Normal adjustment
Fast	For movie image
Slow	For still image

NOTE

- 3D-Y/C is not selectable depending on the input signal type.
- 3D-Y/C may not operate depending on the input signal type or noisy input signal.

Monochrome

For viewing a video in monochrome.

1. Press **MENU** and the MENU screen displays.
2. Press ◀/▶ to select “Picture”.
3. Press ▲/▼ to select “Advanced”, and then press **ENTER**.
4. Press ▲/▼ to select “Monochrome”, and then press **ENTER**.
5. Press ◀/▶ to select “On”, and then press **ENTER**.

Film Mode

Automatically detects a film-based source (originally encoded at 24/25 frames/second, depending on the vertical frequency), analyses it then recreates each still film frame for high-definition picture quality.

1. Repeat steps 1 to 3 in **Monochrome**.
2. Press ▲/▼ to select “Film Mode”, and then press **ENTER**.
3. Press ◀/▶ to select “On”, and then press **ENTER**.

NOTE

- Film Mode is not selectable depending on the input signal type.

Range of OPC

The brightness level range of the OPC sensor’s automatic adjustments can be set according to your preferences. The adjustment range of the OPC sensor can be set to a maximum of +16 and a minimum of -16.

1. Repeat steps 1 to 3 in **Monochrome**.
2. Press ▲/▼ to select “Range of OPC”, and then press **ENTER**.
3. Press ▲/▼ to select “Max.” or “Min.”, and then adjust the item to the desired position.

Selected item	Description
Max.	-15 through +16
Min.	-16 through +15

NOTE

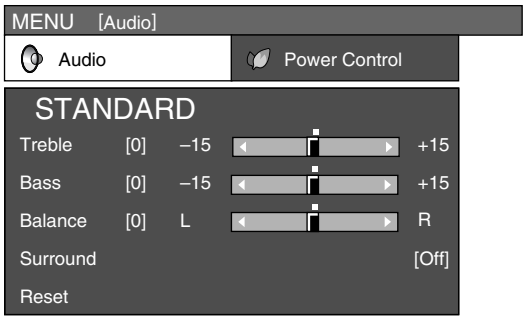
- The range of OPC can only be adjusted when the OPC is set to On.
- The maximum setting cannot be set to a smaller number than the minimum setting.
- The minimum setting cannot be set to a bigger number than the maximum setting.
- The maximum and minimum settings cannot be set to the same number.
- Depending on the brightness of the surrounding light, the OPC sensor might not operate if the adjustment range is small.

Audio adjustment

You can adjust the sound quality to your preference with the following settings.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Audio”.



3 Press ▲/▼ to select a specific adjustment item.

4 Press ◀/▶ to adjust the item to your desired position.

Selected item	◀button	▶button
Treble	For weaker treble	For stronger treble
Bass	For weaker bass	For stronger bass
Balance	Decrease audio from the right speaker	Decrease audio from the left speaker

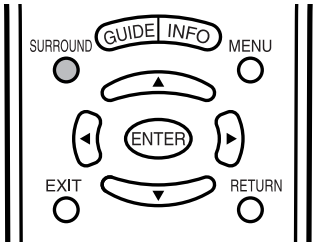
NOTE

- For resetting all adjustment items to factory preset values, press ▲/▼ to select “Reset”, press **ENTER**, press ◀/▶ to select “Yes”, and then press **ENTER**.
- Audio menu items are greyed out when headphones are in use.

Surround

When you set to “On”, you can enjoy surround sound, the same as if you were in a movie theatre.

Using SURROUND on the remote control unit



Press **SURROUND** to switch the Surround function on and off.

Selected item	Description
On	Makes it possible to enjoy natural, realistic surround sound.
Off	Outputs the normal sound.

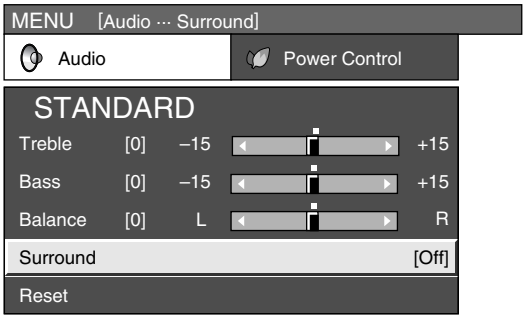
Using Surround on the menu screen

You can produce Surround effects from the “Audio” setting.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Audio”.

3 Press ▲/▼ to select “Surround”, and then press **ENTER**.



4 Press ◀/▶ to select “On”, and then press **ENTER**.

NOTE

- Audio menu items are greyed out when headphones are in use.

Power Control

Power control setting allows you to save energy.

No Signal Off

When set to “Enable”, the power will automatically shut down if no signal inputs for 15 minutes.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “No Signal Off”, and then press **ENTER**.

4 Press ◀/▶ to select “Enable”, and then press **ENTER**
- Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.
- When a TV programme finishes, this function may not operate.

No Operation Off

When set to “Enable”, the power will automatically shut down if there is no operation for 3 hours.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Power Control”.
- Power control menu displays.

3 Press ▲/▼ to select “No Operation Off”, and then press **ENTER**.

4 Press ◀/▶ to select “Enable”, and then press **ENTER**.
- Five minutes before the power shuts down, remaining time displays every minute.

NOTE

- “Disable” is factory preset value.

Basic adjustment settings (Digital)

DTV input mode menu items

List of DTV menu items to help you with operations

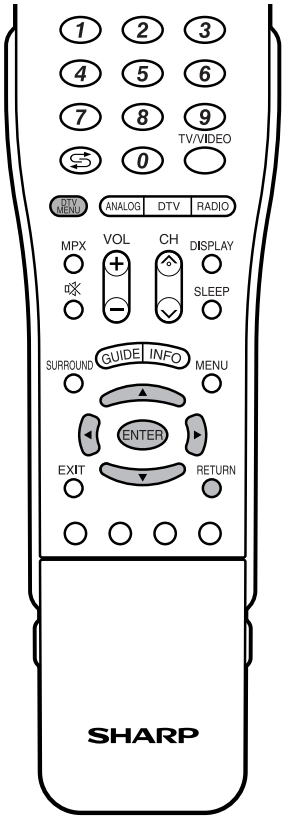
Programme — Programme List ..... Page 34
Programme — Edit Channel — Favourite & Lock ..... Page 34
Programme — Edit Channel — Parental Rate ..... Page 34
Setup — Installation — Auto Search ..... Page 35
Setup — Installation — Manual Adjust ..... Page 35
Setup — Installation — Quick Search ..... Page 36
Setup — Installation — Reset Data ..... Page 36
Setup — System Setup — Video Setup ..... Page 36
Setup — System Setup — Audio Setup — Digital Output ..... Page 37
Setup — System Setup — Audio Setup — Multilingual ..... Page 37
Setup — System Setup — Time Setup ..... Page 37
Setup — System Setup — I-Plate Setup ..... Page 38
Option — Information ..... Page 38
Option — S/W Update (SERVICE ONLY) ..... Page 38

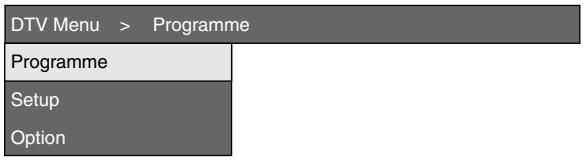
NOTE

- The illustrations and on-screen displays in this manual are for explanation purposes and may vary slightly from the actual operations.

Selecting DTV mode

Press **DTV MENU** to directly display DTV menu screen.





DTV MENU: Press to open or close DTV menu screen.

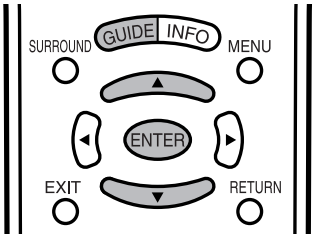
▲/▼/◀/▶: Press to select a desired item on the screen or adjust a selected item.

ENTER: Press to go to the next step or complete the setting.

RETURN: Press to return to the previous step.

Programme Guide

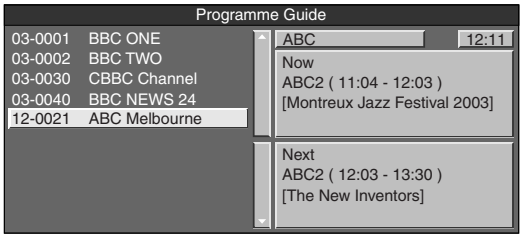
You can check the schedule of DTV events and view detailed information about current or future events.



1 Press **GUIDE** to display the programme guide list.

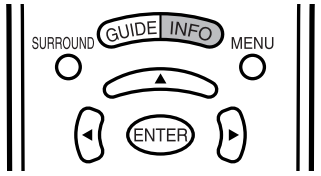
2 Press ▲/▼ to display your desired programme, and then press **ENTER**.

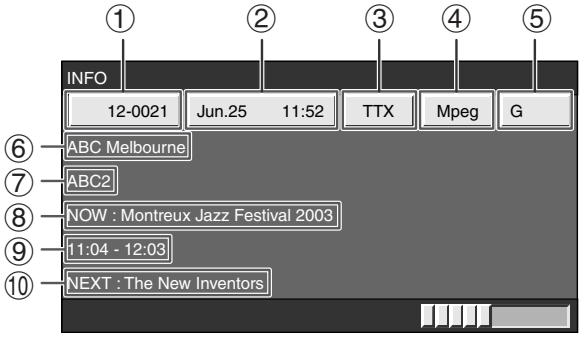
- When you press **ENTER**, the TV jumps to the channel.



Info

While watching DTV you can check the extended programme information on the screen using **INFO** on the remote control.





General INFO screen

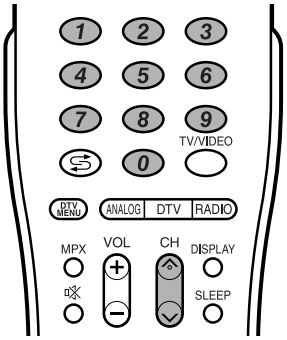
① Current channel number
② Date and current local time
③ Teletext
④ Audio system (Dolby D or MPEG)
⑤ Parental rate
⑥ Station name
⑦ Service name
⑧ Current programme name
⑨ Time for the current programme
⑩ Next programme name

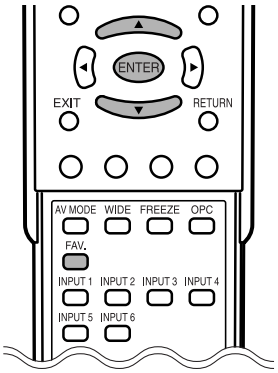
NOTE

- While the I-Plate is still on the screen, you can press **INFO** on the remote control again to call up the extended programme information of the current TV channel.
- Press **INFO** again and you call up the extended information on the next programme.
- Pressing **INFO** again will not display the information for the next programme if "No Available Event Text" under "Next" is displayed.

Favourite Programme List

When you are watching terrestrial TV channels, you can call up the Favourite Programme List using **FAV.** on the remote control.





1 Press **FAV.** to display the Favourite Programme List.

2 Press ▲/▼ to select your desired channel, and then press **ENTER**.

NOTE

- Refer to "Favourite & Lock" to register channels to your Favourite Programme List. (See page 34.)

Changing channels within the Favourite Programme List

1 Repeat steps 1 and 2 in **Favourite Programme List**.

2 Select the registered channels in the Favourite Programme List using **CH**∧/∨ on the remote control unit or the TV.

- The information plate pops up with the "♥" symbol on the left of the channel.

Selecting channels other than Favourite programmes

1 Directly input the number of the channel you want to watch using **0-9** on the remote control unit or select the channel from "Programme List" in the "Programme" menu.

Programme List

You can select the desired programme from the programme list.

1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select “Programme”, and then press **ENTER**.

3 Press ▲/▼ to select “Programme List”, and then press **ENTER**.

4 Press ▲/▼ to select your desired programme number and name, and then press **ENTER**.

Favourite&Lock

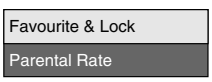
Assign channels to Lock or to Favourite groups.

1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select “Programme”, and then press **ENTER**.

3 Press ▲/▼ to select “Edit Channel”, and then press **ENTER**.
If you have already set the password, enter it here. If not, enter the factory preset password “1234”.
• See page 39 for setting a password.

4 Press ▲/▼ to select “Favourite & Lock”, and then **ENTER**.



5 Press ▲/▼ to select your desired channel.

6 Press ◀/▶ to select “Lock” or “Fav”, and then press **ENTER**.

Selected item	Description
Lock	When the channel is locked, you must enter your Password whenever you tune to the channel.
Fav.	You can easily select your favourite channel from the Favourite Programme List.

NOTE

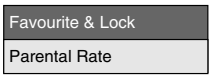
- Press **ENTER** again to cancel “FAV” (♥) or “Lock” (🔒) settings.

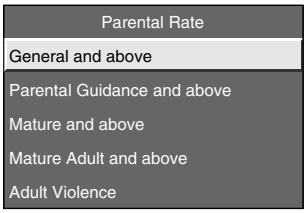
Parental Rate

This function allows TV channels to be restricted. It prevents children from watching violent or sexual scenes that may be considered inappropriate.

1 Repeat steps 1 to 3 in **Favourite & Lock**.

2 Press ▲/▼ to select “Parental Rate”, and then **ENTER**.





3 Press ▲/▼ to select your desired rating, and then press **ENTER**.

Selected item	Description
General and above (G)	Content is not offensive to most viewers.
Parental Guidance and above (PG)	Content is such that parents may not want their children to view the programme.
Mature and above (M)	Mature Audience only. This programme is specifically designed to be viewed by adults and therefore may be unsuitable for children under 15.
Mature Adult and above (MA)	Mature Adult only. Mature Audience only. This programme is specifically designed to be viewed by adults and therefore may be unsuitable for children under 15.
Adult Violence (AV)	Not for children under age 15. Strong elements of sex and/or violence.
Restricted and above (R)	Not for children under age 18. Strong elements of sex and/or violence.
No Block (-)	Cancel the blocking.

Installation

The first time the receiver is powered on, “Database is empty” or “No Channel Available” will display on the screen. Under the main menu, select “Installation” and enter into the sub-menu.

Auto Search

You can automatically search for and download TV channels.

1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select “Setup”, and then press **ENTER**.

3 Press ▲/▼ to select “Installation”, and then press **ENTER**.
If you have already set the password, enter it here. If not, enter the factory preset password “1234”.
• See page 39 for setting a password.

4 Press ▲/▼ to select “Auto Search”, and then press **ENTER**.

5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Auto search starts.
• Programme auto search
You do not need to do anything during the auto search.

NOTE

- Once the DTV signal is scanned, the channel number and programme name will be shown on the programme list.
- The indicator operates concurrently with scanning channels and shows the progress made.

Manual Adjust

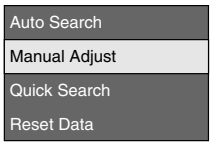
You can set some channel items manually.

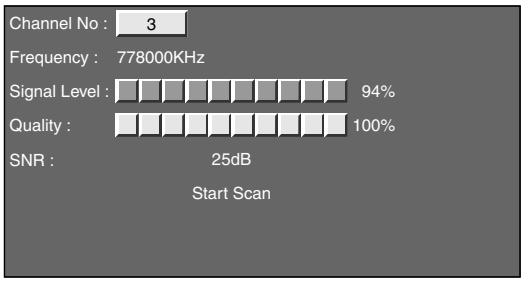
1 Repeat steps 1 to 3 in **Auto Search.**

2 Press ▲/▼ to select “Manual Adjust”, and then press **ENTER**.

3 Press **0** – **9** or ◀/▶ to select a channel number.

4 Press ▲/▼ to select the desired menu item, and make sure the parameters are correct.





5 Press ▲/▼ to select “Start Scan”, and then press **ENTER**.

NOTE

- If a signal locks in, “Start Scan” will change to “Get Channel Success”. Then you can press **EXIT** to leave the installation page and watch a programme or continue scanning for other channels. Anytime you watch a DTV channel and want to know the “Signal Level”, “Quality” or “SNR”, enter into this page.
- If a signal does not lock in, “Start Scan” will show “Timeout Error”. You can scan the signal again, or refer to the “Signal Level” and “Quality” for aligning the direction of the antenna to get the signal.
- **Signal Level:** The signal power or intensity from the broadcasted frequency.
  Quality: The clean level of the signal from the broadcasted frequency.
  SNR: The rate of signal and noise to radiated frequency.

Quick Search

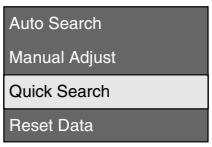
If you live in the cities or regions listed in the "Quick Search" menu, you can scan all DTV channel signals.

1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select "Setup", and then press **ENTER**.

3 Press ▲/▼ to select "Installation", and then press **ENTER**.
If you have already set the password, enter it here. If not, enter the factory preset password "1234".
• See page 39 for setting a password.

4 Press ▲/▼ to select "Quick Search", and then press **ENTER**.



5 Press ▲/▼ to select your city or region listed on the screen, and the press **ENTER**.

NOTE

- If channel frequency is changed by the local TV station or a new channel comes up, you have to scan these channels using "Manual Adjust".

Reset Data

Use this function to clear the channel data.

1 Repeat steps 1 to 3 in **Quick Search**.

2 Press ▲/▼ to select "Reset Data", and then press **ENTER**.

3 Press ◀/▶ to select "Yes", and then press **ENTER**.

Video Setup

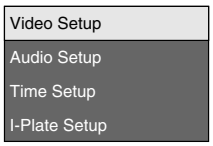
This function allows you to select an output format.

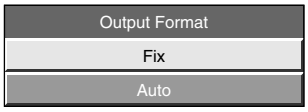
1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select "Setup", and then press **ENTER**.

3 Press ▲/▼ to select "System Setup", and then press **ENTER**.

4 Press ▲/▼ to select "Video Setup", and then press **ENTER**.





5 Press ▲/▼ to select your desired item, and then press **ENTER**.

Selected item	Description
Fix	Displays every DTV broadcast converted to1080i.
Auto	Displays the DTV broadcast in the format it is received.

Digital Output

This function allows you to select your favourite audio output system.

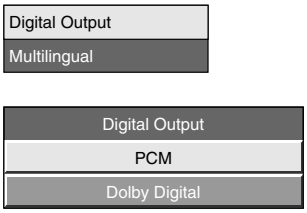
1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select “Setup”, and then press **ENTER**.

3 Press ▲/▼ to select “System Setup”, and then press **ENTER**.

4 Press ▲/▼ to select “Audio Setup”, and then press **ENTER**.

5 Press ▲/▼ to select “Digital output”, and then press **ENTER**.

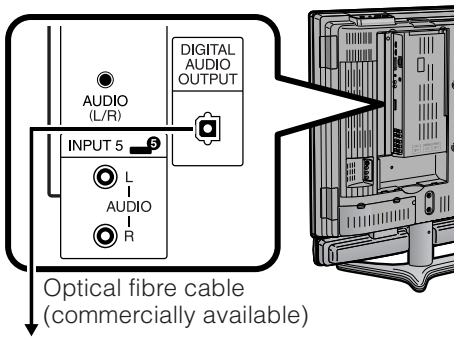


6 Press ▲/▼ to select your desired output system, and then press **ENTER**.

Selected item	Description
PCM	The optical output format is normally in PCM.
Dolby Digital	Dolby Digital audio will be output when there is a Dolby Digital audio signal. The output will be in PCM when there is no Dolby Digital audio signal.

Using Digital Audio Output

It is possible to output audio thought the DIGITAL AUDIO OUTPUT terminal. PCM audio outputs from the terminal.



Optical fibre cable (commercially available)

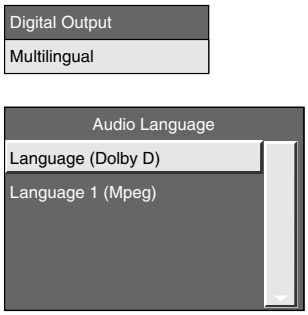
To optical digital input of external audio devices

Multilingual

You can select a different audio language when the broadcast has different audio language.

1 Repeat steps 1 to 4 in **Digital Output**.

2 Press ▲/▼ to select “Multilingual”, and then press **ENTER**.



3 Press ▲/▼ to select your desired audio language, and then press **ENTER**.

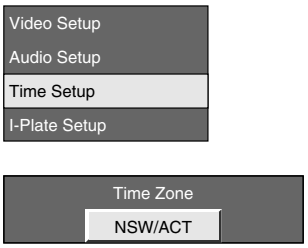
Selected item	Description
Language (Dolby D)	You can enjoy Dolby Digital audio. Outputs Dolby Digital audio from the digital output.
Language (Mpeg)	You can enjoy Mpeg audio. Outputs PCM audio from the digital output regardless of the “Digital output” setting.

Time Setup

This function allows you to select your local time zone.

1 Repeat steps 1 to 3 in **Digital Output**.

2 Press ▲/▼ to select “Time Setup”, and then press **ENTER**.



3 Press ◄/► to select your local time zone, and then press **ENTER**.

I-Plate Setup (Information Plate Setup)

This function allows you to configure the display time and time format for the information plate.

1 Press **DTV MENU** to display the DTV menu screen.

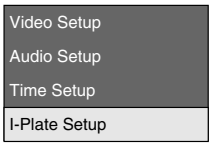
2 Press ▲/▼ to select “Setup”, and then press **ENTER**.

3 Press ▲/▼ to select “System Setup”, and then press **ENTER**.

4 Press ▲/▼ to select “I-Plate Setup”, and then press **ENTER**.

5 Press ▲/▼ to select your desired item.

6 Press ◀/▶ to select your desired value, and then press **ENTER**.



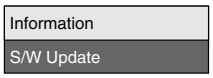
Information

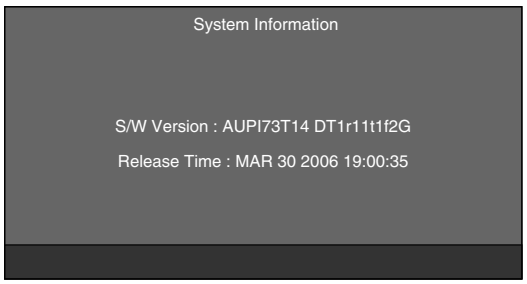
You can check the current version of the hardware and software on the screen.

1 Press **DTV MENU** to display the DTV menu screen.

2 Press ▲/▼ to select “Option”, and then press **ENTER**.

3 Press ▲/▼ to select “Information”, and then press **ENTER**.





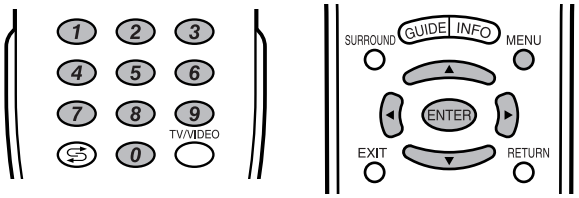
S/W Update (SERVICE ONLY)

This function is only for service personnel to use for software updates.

Useful adjustment settings

Password setting for child lock (for TV/DTV input mode)

Allows you to use a password to protect certain settings from being accidentally changed.



Setting a password

Register a 4-digit password number to use the Child Lock function.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Child Lock”, and then press **ENTER**.

4 If you already set the password, enter it here. If not, enter the factory preset password “1234”.

– – – –

5 Press ▲/▼ to select “Change password”, and then press **ENTER**.

6 Enter the 4-digit number as a password using **0** – **9**.

7 Enter the same 4-digit number as in step 6 to confirm.

- “The new password was registered.” displays.

NOTE

- To view a locked channel (Lock setting in Programme Setup “Manual Adjust” is set to “On”), you must enter a password. (See page 24.) When you select a locked channel, a password prompt message pops up. Press **ENTER** to display the password input window.

Resetting the password

Allows you to reset your password.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

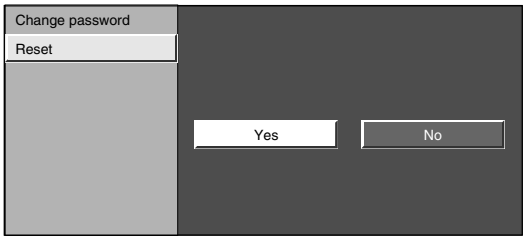
3 Press ▲/▼ to select “Child Lock”, and then press **ENTER**.

4 Enter the password.

– – – –

5 Press ▲/▼ to select “Reset”, and then press **ENTER**.

6 Press ◀/▶ to select “Yes”, and then press **ENTER**.



NOTE

- **As a precautionary measure, make a note of your password and keep it in a familiar place. If you lose or forget your password, initialise the TV to return all settings except for the TV channel settings to factory preset values. (See page 59.)**
- This function is only available for TV/DTV input mode.
- To relock a channel which has been temporarily unlocked by inputting the correct password, turn power off and then on again.

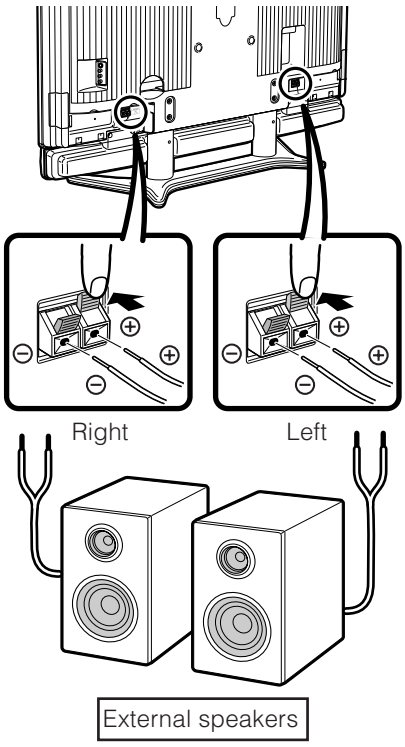
Speaker Setup

Connecting external speakers

1 Press **POWER** on the top TV panel to turn it off.

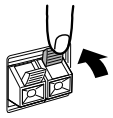
2 Connect external speakers to the TV.

Rear view

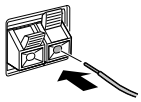


Connecting speaker cables

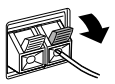
① Push up the tab.



② Insert the end of the cable into the hole while pressing up on the tab.



③ Release the tab.



CAUTION

- Make sure external speakers have 4 ohm and 15 watt specifications.
- Speaker terminals and speaker cables have plus and minus polarities. Make sure that each polarity of terminals and cables is connected with the same polarity when connecting external speakers.
- Insert the speaker cable's lead wire carefully so that it goes straight to the hole of the speaker terminal. The speaker cable needs to be firmly inserted until the speaker cable's lead wire reaches the metal part of the speaker terminal.

External Audio Bypass

External Audio Bypass automatically optimises the audio quality to suit internal (supplied) speakers.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select "Setup".

3 Press ▲/▼ to select "Speaker Setup", and then press **ENTER**.

4 Press ▲/▼ to select "External Audio Bypass", and then press **ENTER**.

5 Press ◀/▶ to select "Yes" or "No", and then press **ENTER**.

Selected item	Description
Yes	When you are using your own speakers, output the original sound.
No	Sets the optimum audio for the internal (supplied) speakers.

Input Skip

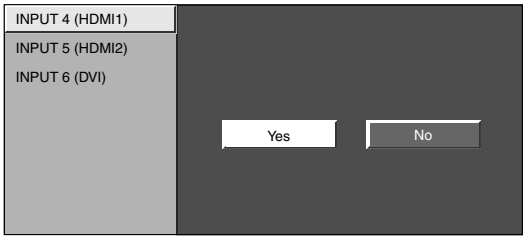
This setting allows you to skip the HDMI or DVI input on the “Input Select” menu.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Input Skip”, and then press **ENTER**.

4 Press ▲/▼ to select the Input (INPUT4, INPUT5 or INPUT6) you wish to skip, and then press **ENTER**.



5 Press ◀/▶ to select “Yes”, and then press **ENTER**.

6 Press **MENU** to exit.

Input Signal (PC input mode only)

- Some input signals may have to be registered manually to display properly.
- The pairs of input signals (resolutions) in the list below are not distinguishable when received. In such case, you have to set the correct signal manually. After setting once, it will display when the same signal (resolution) is input again.

1024×768	1360×768

NOTE

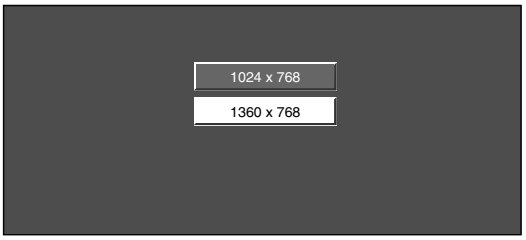
- You can only select the “Input Signal” on the Setup menu when receiving one of the 2 input signals listed above.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Input Signal” and then press **ENTER**.

4 Press ▲/▼ to select the desired input signal on the display.



(Example)

Auto Sync. adjustment (PC input mode only)

For automatically adjusting the PC image.

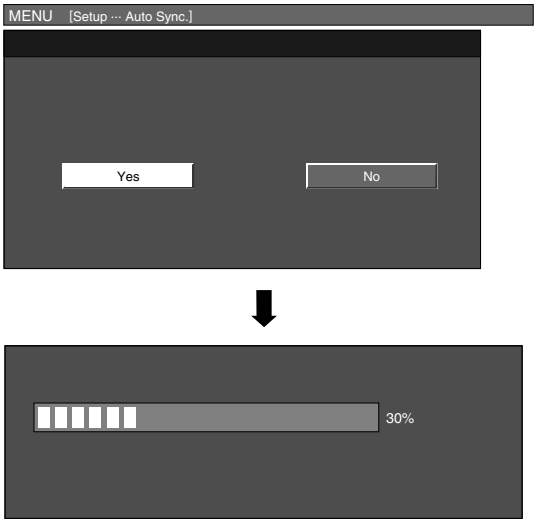
1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Auto Sync.”, and then press **ENTER**.

4 Press ◀/▶ to select “Yes”, and then press **ENTER**.

- Auto Sync. starts and “Adjusting the image” displays.



5 Press **MENU** to exit.

NOTE

- When Auto Sync. is successful, “Auto Sync completed successfully.” displays. If not, Auto Sync. failed.
- Auto Sync. may fail even if “Auto Sync completed successfully.” displays.
- Auto Sync. may fail if the computer image has low resolution, has unclear (black) edges, or is moved while executing Auto Sync.
- Be sure to connect the PC to the TV and switch it on before starting Auto Sync.
- Auto Sync. can be executed only when inputting analogue signals.

Fine Sync. adjustment (PC input mode only)

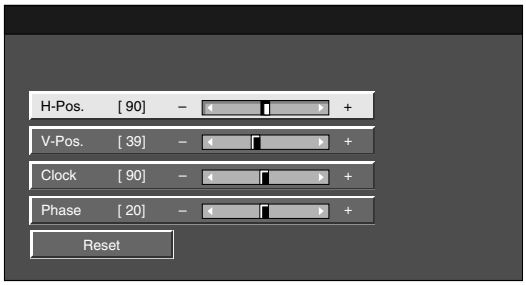
Ordinarily you can easily adjust the picture as necessary to change image position using Auto Sync. In some cases, however, manual adjustment is needed to optimize the image.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Fine Sync.”, and then press **ENTER**.

4 Press ▲/▼ to select the specific adjustment item.



Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it to the up or down.
Clock	Adjust when the image flickers with vertical stripes.
Phase	Adjust when characters have low contrast or when the image flickers.

5 Press ◀/▶ to adjust the item to your desired position.

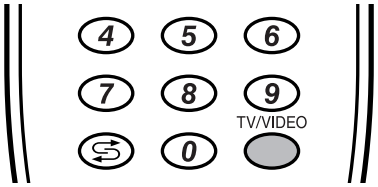
6 Press **MENU** to exit.

NOTE

- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.
- “Clock” and “Phase” in the “Fine Sync” menu can be adjusted only when inputting analogue signals.

Input Label

You can assign each input source a label you like.



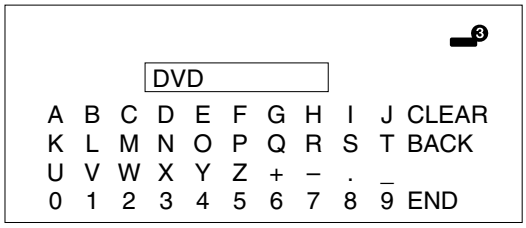
1 Press **TV/VIDEO** to select the desired input source.

2 Press **MENU** and the MENU screen displays.

3 Press ◀/▶ to select “Setup”.

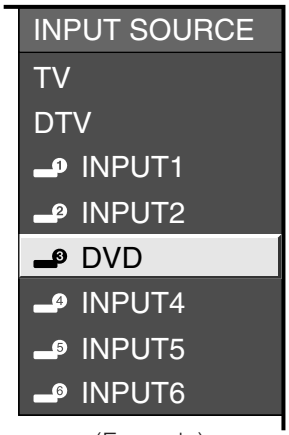
4 Press ▲/▼ to select “Input Label”, and then press **ENTER**.

5 Press ▲/▼/◀/▶ to select each character of the new name for the input source, and then press **ENTER**.



(Example)

6 Repeat until the name is fully spelt out.
- The name can be 6 characters or less.
- When you want to set an input source name of less than 6 characters, select “END”, then press **ENTER** to exit from the labelling menu.



(Example)

NOTE
- You cannot change labels if the INPUT SOURCE is TV or DTV.

Image position

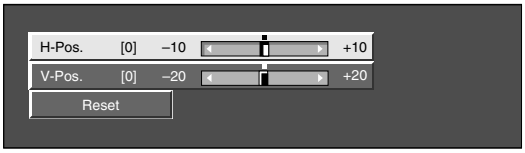
For adjusting a picture’s horizontal and vertical position.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Position”, and then press **ENTER**.

4 Press ▲/▼ to select “H-Pos.” or “V-Pos.”.



Selected item	Description
H-Pos.	Centres the image by moving it to the left or right.
V-Pos.	Centres the image by moving it to the up or down.

5 Press ◀/▶ to adjust the item to your desired position.

NOTE
- For resetting all adjustment items to the factory preset values, press ▲/▼ to select “Reset”, and then press **ENTER**.
- **Adjustments are stored separately according to input source.**

Wide Screen Signalling (WSS)

WSS allows a television to switch automatically among the different screen formats.

1. Press **MENU** and the MENU screen displays.
2. Press ◄/► to select “Setup”.
3. Press ▲/▼ to select “WSS”, and then press **ENTER**.
4. Press ◄/► to select “On” or “Off”, and then press **ENTER**.

NOTE

- Try to set WIDE mode if an image does not switch to the correct screen format. When the broadcast signal contains no WSS information, the function will not work even if enabled.

Picture aspect ratio

The WSS signal has 4:3 auto-switching that allows you to select between Panorama and Normal.

1. Press **MENU** and the MENU screen displays.
2. Press ◄/► to select “Setup”.
3. Press ▲/▼ to select “4:3 Mode”, and then press **ENTER**.
4. Press ◄/► to select “Panorama” or “Normal”, and then press **ENTER**.

WSS signal 4:3 screen

4:3 mode “Panorama”

4:3 mode “Normal”

Selected item	Description
Panorama	Wide image without side bars
Normal	Normal range keeping 4:3 or 16:9 aspect ratio

Standby Mode

Standby Mode may be set to either start the TV quickly from standby or conserve energy while on standby.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Standby Mode”, and then press **ENTER**.

4 Press ▲/▼ to select “Mode1” or “Mode2”, and then press **ENTER**.

Selected item	Description
Mode1	Starting the TV is quick from standby.
Mode2	Power consumption is small during standby.

5 Press **MENU** to exit.

Reset

If complex adjustments are made and the settings cannot be restored to normal, you can reset the settings to the factory preset values.

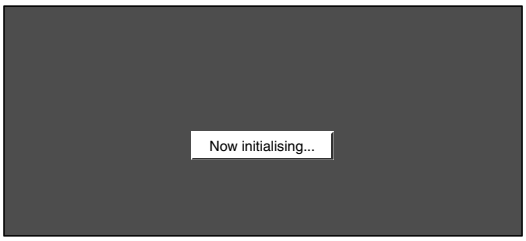
1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Reset”, and then press **ENTER**.
- “Return to factory pre-settings.” displays on the screen.

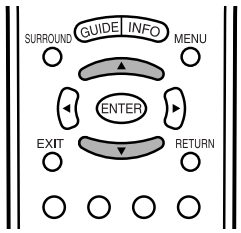
4 Press ◀/▶ to select “Yes”, and then press **ENTER**.
- “Now, TV will restart automatically. OK?” displays on the screen.

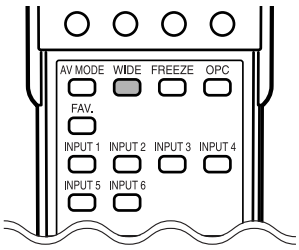
5 Press ◀/▶ to select “Yes”, and then press **ENTER**.
- “Now initialising...” displays on the screen and blinks.
- After the reset has completed, the power shuts off and then comes back on. The screen will have returned to its original settings.

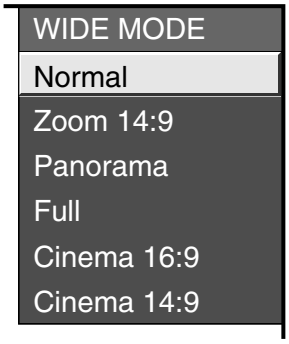


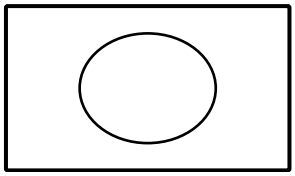
NOTE

- The AV MODE will be set to “DYNAMIC”.
- The Programme Setup settings will not be changed.
- The Language settings will not be changed.

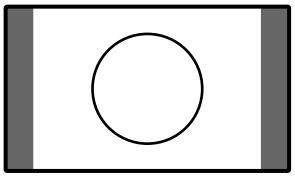








4:3 Mode set to “Panorama”



4:3 Mode set to “Normal”

WIDE mode (for TV/AV input mode)

Manual Selection

1 Press **WIDE**.

- The WIDE MODE menu displays.
- The menu lists the wide mode options selectable for the type of video signal currently received.

2 Press **WIDE** or ▲/▼ while the WIDE MODE menu displays on the screen.

- As you toggle down the options, each is immediately reflected on the TV.

Auto Selection

If you set “WSS” and “4:3 Mode” in the Setup menu on page 44, the optimum WIDE mode is automatically chosen for every broadcast containing the WSS information.

“WSS” menu

To enable Auto Selection, set “WSS” in the Setup menu to “On”. (See page 44.)

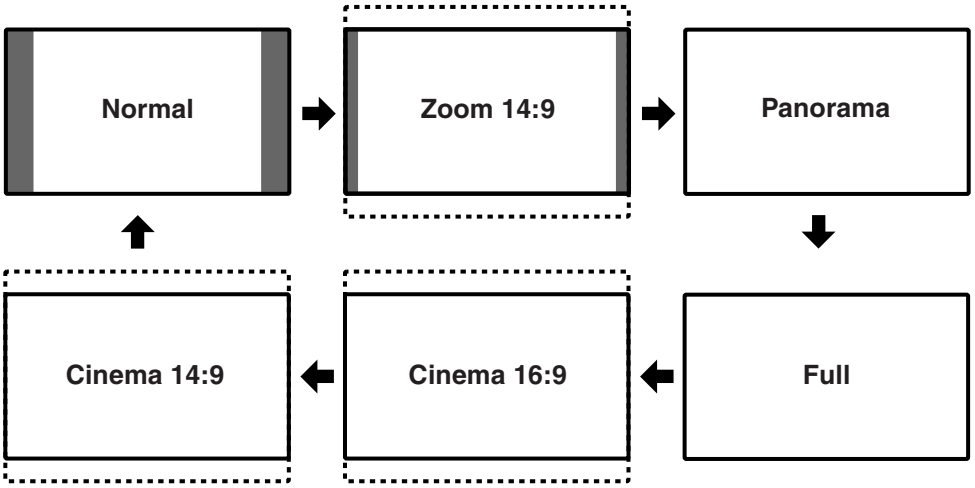
“4:3 Mode” menu

To set the type of the wide screen, select “Panorama” or “Normal” in the 4:3 Mode menu. (See page 44.)

NOTE

- If the broadcast signal contains no WSS information, Auto Selection will not function even when the WSS option is enabled.

Selected item	Description
Normal	For 4:3 “standard” pictures. A side bar appears on each side.
Zoom 14:9	For 14:9 letterbox pictures. A thin side bar appears on each side, and you may also see bars on the top and bottom with some programmes.
Panorama	In this mode the picture is progressively stretched toward each side of the screen.
Full	For 16:9 squeeze pictures.
Cinema 16:9	For 16:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Cinema 14:9	For 14:9 letterbox pictures. Bars may appear on the top and bottom with some programmes.
Dot by Dot	Displays an image with the same number of pixels on the screen (only when receiving 1080i/1080p signal).



NOTE

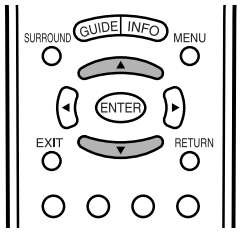
- Screen sizes may not toggle in the order illustrated on the left, depending on the input signal.

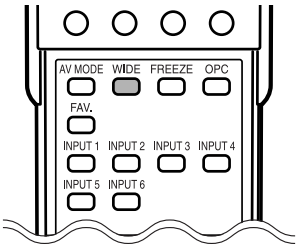
WIDE mode (for PC input mode)

You can select the screen size.

NOTE

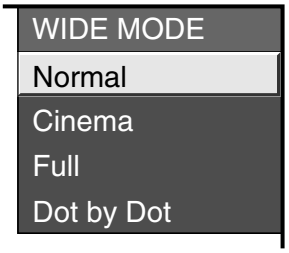
- Connect the PC before making adjustments.
- Selectable screen size may vary with input signal type.





1 Press **WIDE**.

- The WIDE MODE menu displays.

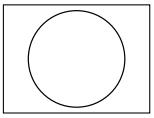
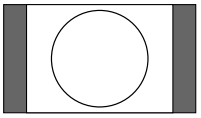
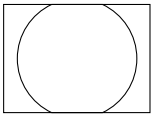
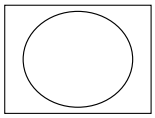
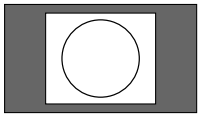


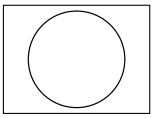
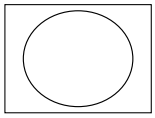
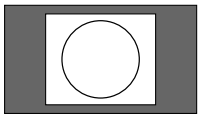
(Example)

2 Press **WIDE** or ▲/▼ to select a desired item on the menu.

EXAMPLE

Screen size images.

Input Signal	Normal	Cinema	Full	Dot by Dot
 1024×768	 Keeps the original aspect ratio in a full screen display.	 For viewing wide-screen programs. The top and bottom of the image is slightly cropped.	 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

Input Signal			Full	Dot by Dot
 1360×768			 An image fully fills the screen.	 Detects the resolution of the signal and displays an image with the same number of pixels on the screen.

Audio Only

When listening to music from a music programme, you can set the display off and enjoy audio only.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Audio Only”, and then press **ENTER**.

4 Press ◀/▶ to select “On”, and then press **ENTER**.

Selected item	Description
On	Audio is output without screen image.
Off	Both screen images and audio are output.

NOTE

- When you make operations that change the picture on the TV such as by changing the input source, the Audio Only function is set to “Off”.

DNR (Digital Noise Reduction)

Produces a clearer video image.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “DNR”, and then press **ENTER**.

4 Press ▲/▼ to select the desired level, and then press **ENTER**.

HDMI Setup

HDMI (High-Definition Multimedia Interface) terminal selection.

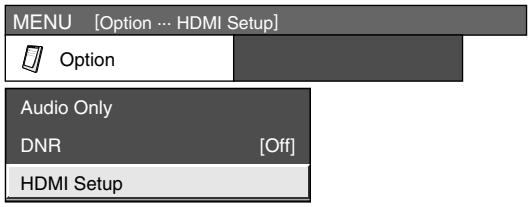
1 To watch an HDMI equipment image, select “INPUT4” or “INPUT5” using **TV/VIDEO** on the remote control unit or on the TV.

2 Press **MENU** and the MENU screen displays.

3 Press ◀/▶ to select “Option”.

4 Press ▲/▼ to select “HDMI Setup”, and then press **ENTER**.

- The HDMI Setup can be selected only when “INPUT4” or “INPUT5” is selected.



5 Press ▲/▼ to select the desired item, and then press **ENTER**.

HDMI Setup items	Selectable items	Description
Signal Type	RGB/YCbCr 4:4:4/ YCbCr 4:2:2	Select the video signal type from the HDMI terminal.
Auto View	Enable/Disable	Set whether or not to use WIDE MODE based on signal recognition, including an HDMI signal.
Audio Select	Digital/Analogue	Select “Digital” for audio signal via the HDMI terminal. Select “Analogue” for audio signal via the AUDIO jack.

6 Press ▲/▼/◀/▶ to select the desired setting, and then press **ENTER**.

NOTE

- Refer to your external equipment operation manual for the signal type.
- Item under “Signal Type” can be selected when the equipment is connected with a DVI-HDMI conversion cable.
- When the equipment is connected with an HDMI cable, items are automatically set and cannot be selected.
- “Audio Select” is only available for INPUT5.

Language setting for on-screen display

You can also select a language from setup menu. Select from among 3 languages: English, Chinese and Arabic.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Setup”.

3 Press ▲/▼ to select “Language”, and then press **ENTER**.

4 Press ▲/▼ to select the desired language listed on the screen, and then press **ENTER**.

Identification

You can check the current version of the software on the screen.

Colour system setting

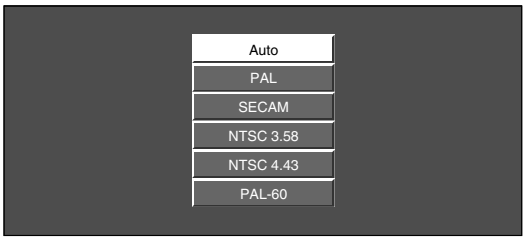
You can change the colour system to one that is compatible with the image on the screen.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Colour System”, and then press **ENTER**.

4 Press ▲/▼ to select a compatible video signal system of your equipment, and then press **ENTER**.



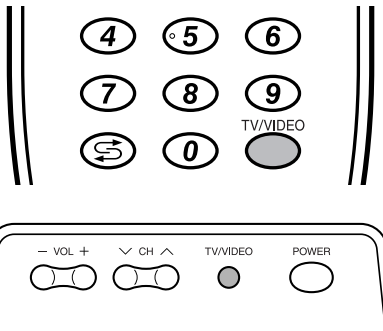
NOTE

- Factory preset value is “Auto”.
- If “Auto” is selected, colour system for each channel is automatically set. If an image does not display clearly, select another colour system (e.g. PAL, NTSC 4.43).

Using external equipment

Displaying an external equipment image

Explanation here is for the setting when connecting DVD to INPUT1 terminal.

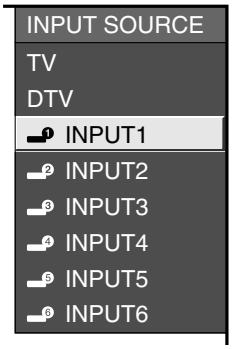


NOTE

- Each time **TV/VIDEO** is pressed, the input source toggles.
- If the image does not come in clearly, you may need to change the input signal type setting on the “Input Select” menu.
- Refer to your external equipment operation manual for the signal type.

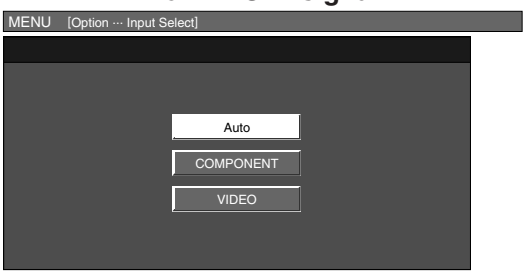
Displaying a DVD image (Example)

1 To watch a DVD image, select “INPUT1” using **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.



2 Select the desired signal type on “Input Select” in the “Option” menu.

For INPUT1 signal



The setting is stored and can be selected.

Input Select

Selecting input source

Can use for selecting the input source.

1 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV.

2 Press **TV/VIDEO** on the remote control unit or **TV/VIDEO** on the TV to select the input source.

- An image from the selected source automatically displays.
- You can also select the input source by pressing ▲/▼.

Selecting input signal type

For setting the signal type of external equipment.

1 Press **MENU** and the MENU screen displays.

2 Press ◀/▶ to select “Option”.

3 Press ▲/▼ to select “Input Select”, and then press **ENTER**.

4 Press ▲/▼ to select a signal type you want to set, and then press **ENTER**.

Input source	Selectable item
INPUT 1	Auto, COMPONENT, VIDEO
INPUT 2	Auto, COMPONENT, VIDEO
INPUT 3	Auto, S-VIDEO, VIDEO
INPUT 6	Auto, DIGITAL, ANALOGUE

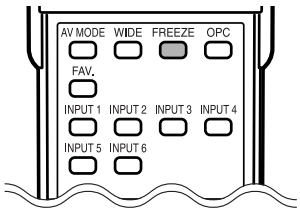
NOTE

- **If no (colour) image displays, try to change the other signal type.**
- Check the operation manual of the external equipment for the signal type.
- When the signal type is set to “Auto”, the input terminal where cable is connected is automatically selected.
- When the signal type is set to “Auto” and multiple video signal cables are connected, the signal type is selected in the following prioritised order:
  INPUT 1/INPUT 2: COMPONENT → VIDEO
  INPUT 3: S-VIDEO → VIDEO
- When the signal type for “INPUT6” is set to “DIGITAL” or “ANALOGUE”, a “PC” or “AV” signal is automatically detected.

Useful features

Freezing images

Allows you to capture and freeze one frame from a moving image that you are watching.



1 Press **FREEZE**.

- Capture one frame from a moving image.

2 Press **FREEZE** again to cancel the function.

NOTE

- This function does not work in INPUT 6.
- When this function is not available, “No still image display available.” will display.
- The still image automatically goes out after 30 minutes.

Teletext language setting

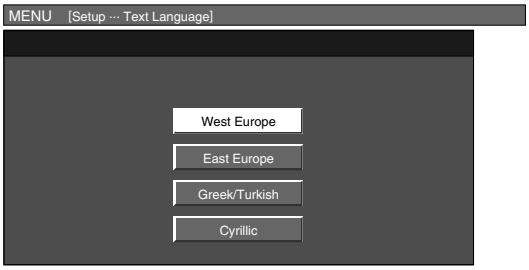
If Teletext information does not display correctly, perform the setting procedure below.
Select from among 4 kinds of language tables: West Europe, East Europe, Greek/Turkish, Cyrillic.
Each table is compatible with the Teletext languages listed below.

1 Press **MENU** and the MENU screen displays.

2 Press ◄/► to select “Setup”.

3 Press ▲/▼ to select “Text Language”, and then press **ENTER**.

4 Press ▲/▼ to select receivable teletext broadcasting language in your country, and then press **ENTER**.



- West Europe - English, French, Scandinavian, Czech, German, Spanish, Italian
- East Europe - Polish, French, Scandinavian, Czech, German, Slovenian/Croatian, Italian, Rumanian
- Greek/Turkish - English, French, Scandinavian, Turkish, German, Spanish, Italian, Greek
- Cyrillic - English, Russian, Estonian, Czech, German, Spanish, Ukrainian, Lettish

NOTE

- Teletext can display only when it is sent by a network. Not used to convert between languages.

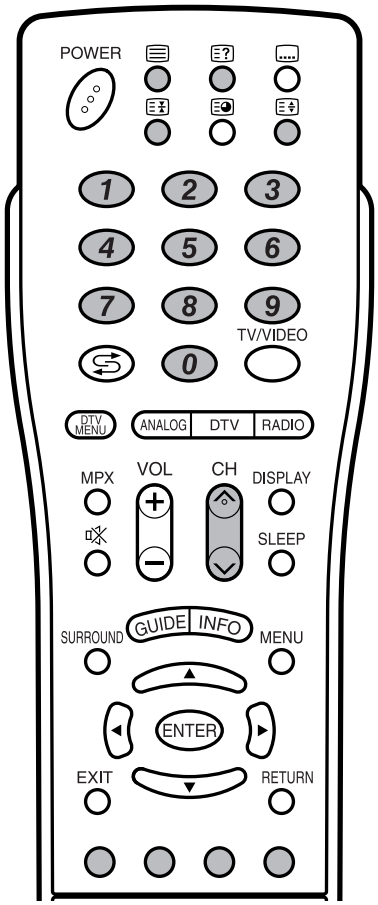
Teletext function

What is Teletext?

Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your TV receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather reports, sports information, stock exchange prices and programme previews are among the many services available.

Teletext mode

Teletext is turned on/off with ☰ on the remote control unit. You can operate your TV in Teletext mode directly by inputting commands with the remote control unit.



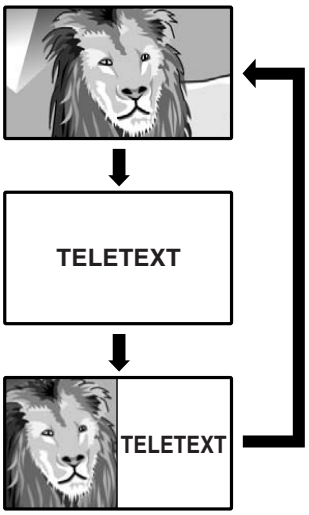
Turning on and off Teletext

1 Select a TV channel or external input source providing the Teletext programme.

2 Press ☰ to display the Teletext.

3 Press ☰ again to display the Teletext on the right screen and normal image on the left screen.

- Each time you press ☰, the screen switches as shown upper right.
- If you select a programme with no Teletext signal, "No Teletext available." is displayed.
- The same message displays during other modes if no Teletext signal is available.



NOTE

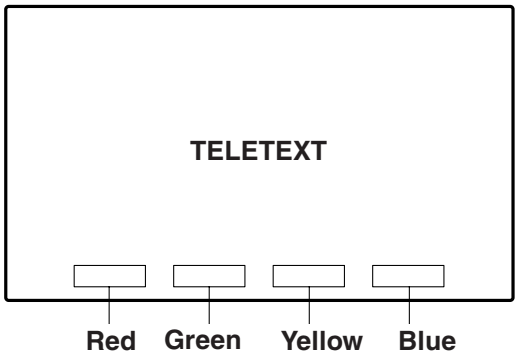
- This dual screen cannot be displayed in DTV mode.

When viewing the Teletext information

- Press **CH**∧ to increase the page number.
- Press **CH**∨ to decrease the page number.

Button functions

Colour (Red/Green/Yellow/Blue):
You can select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (Red/Green/Yellow/Blue)** on the remote control unit.



0 – 9:
Directly select any page from 100 to 899 by using **0 – 9**.

☰ (Top/Bottom/Full):
Each time you press ☰, the TELETEXT image switches as shown below.

Full (Displays in full screen)
↓
Top (Displays in the upper half of the screen)
↓
Bottom (Displays in the lower half of the screen)

NOTE

- This function is not available in DTV mode.

☰ (Reveal hidden for TELETEXT):
To reveal hidden information such as an answer to a quiz, press ☰.

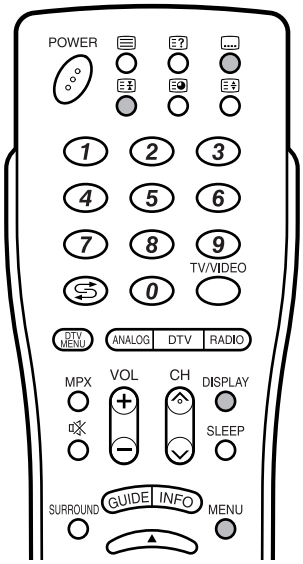
- Press ☰ again to hide the information.

☰ (Hold):
To stop updating Teletext pages automatically, press ☰.

- Press ☰ again to release the hold mode.

Displaying Subtitle

You can display several subtitles as they are transmitted.



1 Press to display the subtitle.

- Subtitle is updated by information sent by the broadcasting station.
- To stop updating subtitle automatically, press .

2 Press to exit the subtitle screen.

NOTE

- Subtitle will not be displayed when the service does not contain the subtitle information.

Time display

You can display the time information included in the DTV and Teletext broadcasts.

NOTE

- Skip step 1 if receiving DTV broadcasts.

1 Select a TV channel providing Teletext information. (The time information is automatically captured.)

2 Press **DISPLAY**. The channel display will appear on the display.

3 Press **DISPLAY** again within the three-second interval the channel display is on the screen. Time information will display on the lower left of the screen for about three seconds.

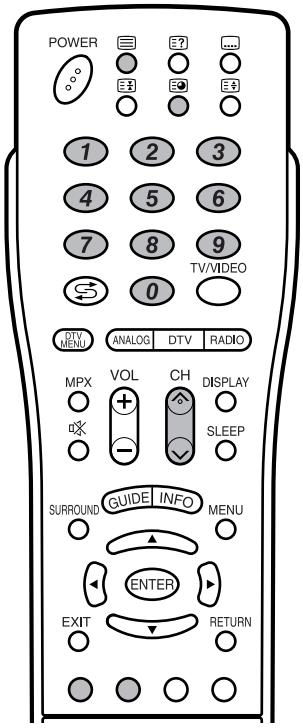
4 Even when you change the TV channel, you can display the time information with steps 2 to 3 above.

NOTE

- The time display cannot be stored once the power is turned off. When you turn on the power, perform steps 1 to 4 again.
- If acquired successfully the time information will appear in the upper-right corner of the screen by pressing **MENU**.

Displaying Subpages

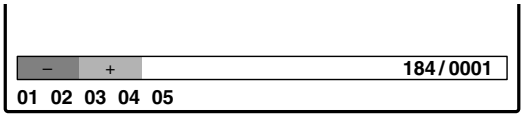
You can display several subpages as they are transmitted.



1 Press to display Teletext.

2 Press to display the subpage as shown below.

Subpage screen



3 Select the desired subpage by using **CH**∧/**CH**∨, **Red** or **Green**.

- **0** – **9** directly selects the desired subpage.

4 Press to exit the subpage screen.

NOTE

- You cannot display subpage screens in DTV mode.

Appendix

Troubleshooting

Problem	Possible Solution
• No power.	• Check if you pressed **POWER** on the remote control unit. (See page 15.) If the indicator on the TV lights up red, press **POWER**. • Is the AC cord disconnected? (See page 6.) • Has the power been turned on? (See page 15.)
• Unit cannot be operated.	• External influences such as lightning, static electricity, etc., may cause improper operation. In this case, operate the unit after first turning the power off the TV or unplugging the AC cord and re-plugging it in after 1 or 2 minutes.
• Remote control unit does not operate.	• Are batteries inserted with polarity (+, −) aligned? (See page 5.) • Are batteries worn out? (Replace with new batteries.) • Are you using it under strong or fluorescent lighting? • Is a fluorescent light illuminated to remote control sensor?
• Picture is cut off.	• Is the image position correct? (See page 43.) • Are screen mode adjustments such as picture size made correctly? (See pages 44, 46 and 47.)
• Strange colour, light colour, or dark, or colour misalignment.	• Adjust the picture tone. (See pages 27 to 29 and 48.) • Is the room too bright? The picture may look dark in a room that is too bright. • Check the colour system setting. (See pages 23 and 49.) • Check the input signal setting. (See pages 41 and 50.) • Check the HDMI Setup setting. (See page 48.)
• Power is suddenly turned off.	• The unit's internal temperature has increased. Remove any objects blocking vent or clean. • Check the power control setting. (See page 31.) • Is sleep timer set? (See page 17.)
• No picture.	• Is connection to other equipment correct? (See pages 10 and 11.) • Has input signal setup been done correctly after connection? (See pages 41 and 50.) • Is the correct input selected? (See page 50.) • Is picture adjustment correct? (See pages 27 to 29.) • Is the antenna connected properly? (See page 9.) • Is "On" selected in "Audio Only"? (See page 48.)
• No sound.	• Is the volume too low? (See page 17.) • Make sure that headphones are not connected. (See page 12.)

Troubleshooting (DTV)

Problem	Possible Solution
• No picture or no sound.	• Is the correct input source selected? (See page 50.)
• Block noise appears on the screen.	• Is the antenna pointing in the correct direction? • Check the Signal Level and Quality. (See page 35.) • Are physical objects blocking the antenna? • Is the antenna or antenna cable compatible with DTV broadcasts?
• DTV broadcasts cannot be received.	• Is the DTV antenna set up properly? • Is the antenna cable connected properly? (See page 9.) • Are the channel settings correct? (See pages 35 and 36.)
• A specific channel cannot be received.	• Check the Signal Level and Quality. (See page 35.)

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
  Storage temperature: –20°C to +60°C.

RS-232C port specifications

PC Control of the TV

- When a programme is set, the TV can be controlled from the PC using the RS-232C terminal. The input signal (PC/video) can be selected, the volume can be adjusted and various other adjustments and settings can be made, enabling automatic programmed playing.
- Attach an RS-232C cable cross-type (commercially available) to the supplied Din/D-sub RS-232C for the connections.

NOTE

- This operation system should be used by a person who is accustomed to using PCs.

Communication conditions

Set the RS-232C communications settings on the PC to match the communications conditions of the TV. The communications settings of the TV are as follows:

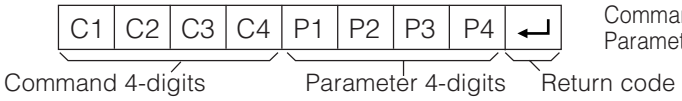
Baud rate:	9,600 bps
Data length:	8 bits
Parity bit:	None
Stop bit:	1 bit
Flow control:	None

Communication procedure

Send the control commands from the PC via the RS-232C connector.
The TV operates according to the received command and sends a response message to the PC.
Do not send multiple commands at the same time. Wait until the PC receives the OK response before sending the next command.

Command format

Eight ASCII codes + CR



Command 4-digits: Command. The text of four characters.
Parameter 4-digits: Parameter 0 – 9, space, ?

Parameter

Input the parameter values, aligning left, and fill with space(s) for the remainder. (Be sure that four values are input for the parameter.)
When the input parameter is not correct, “ERR” returns. (Refer to “Response code format”.)

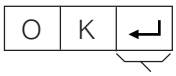
0			
0	0	0	9
–	3	0	
1	0	0	
0	0	5	5

When “?” is input for some commands, the present setting value responds.

?			
?	?	?	?

Response code format

Normal response



Problem response
(communication error or incorrect command)

Commands

• Commands not indicated here are not guaranteed to operate.

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
POWER SETTING	POWR	0___	POWER OFF (STANDBY)
INPUT SELECTION A	ITGD	___	INPUT SWITCHING (TOGGLE)
	ITVD	___	TV (CHANNEL FIXED)
	IDTV	___	DTV (CHANNEL FIXED)
	IAVD	*__	INPUT1 – 6 (1 – 6)
CHANNEL	DCCH	**_	TV DIRECT CHANNEL (1 – 99)
	CHUP	___	CHANNEL UP
	CHDW	___	CHANNEL DOWN
	DTVD	***_	DTV DIRECT CHANNEL (1 – 999)
	DTUP	___	DTV CHANNEL UP
	DTDW	___	DTV CHANNEL DOWN
INPUT SELECTION B	INP1	0___	INPUT1 (AUTO)
	INP1	1___	INPUT1 (COMPONENT)
	INP1	3___	INPUT1 (VIDEO)
	INP2	0___	INPUT2 (AUTO)
	INP2	1___	INPUT2 (COMPONENT)
	INP2	3___	INPUT2 (VIDEO)
	INP3	0___	INPUT3 (AUTO)
	INP3	2___	INPUT3 (S-VIDEO)
	INP3	3___	INPUT3 (VIDEO)
	INP6	0___	AUTO
	INP6	5___	DIGITAL
	INP6	6___	ANALOGUE
AV MODE SELECTION	AVMD	0___	TOGGLE
	AVMD	1___	STANDARD
	AVMD	2___	MOVIE
	AVMD	3___	GAME
	AVMD	4___	USER
	AVMD	5___	DYNAMIC (Fixed)
	AVMD	6___	DYNAMIC
	AVMD	7___	PC

CONTROL ITEM	COMMAND	PARAMETER	CONTROL CONTENTS
VOLUME	VOLM	**__	VOLUME (0 – 60)
POSITION	HPOS	***_	H-POSITION (AV) (– 10 – + 10)
	HPOS	***_	H-POSITION (PC) (0 – 180)
	VPOS	***_	V-POSITION (AV) (– 20 – + 20)
	VPOS	***_	V-POSITION (PC) (0 – 100)
	CLCK	***_	CLOCK (0 – 180)
	PHSE	***_	PHASE (0 – 40)
WIDE MODE	WIDE	0___	TOGGLE (AV)
	WIDE	1___	NORMAL (AV)
	WIDE	2___	ZOOM 14:9 (AV)
	WIDE	3___	PANORAMA (AV)
	WIDE	4___	FULL (AV)
	WIDE	5___	CINEMA 16:9 (AV)
	WIDE	6___	CINEMA 14:9 (AV)
	WIDE	7___	NORMAL (PC)
	WIDE	8___	CINEMA (PC)
	WIDE	9___	FULL (PC)
	WIDE	10__	DOT BY DOT (PC)
MUTE	MUTE	0___	TOGGLE
	MUTE	1___	MUTE
	MUTE	2___	MUTE OFF
SURROUND	ACSU	0___	SURROUND TOGGLE
	ACSU	1___	SURROUND ON
	ACSU	2___	SURROUND OFF
AUDIO CHANGE	ACHA	___	TOGGLE
SLEEP TIMER	OFTM	0___	OFF
	OFTM	1___	SLEEP TIMER 30 MIN
	OFTM	2___	SLEEP TIMER 1 HOUR
	OFTM	3___	SLEEP TIMER 1 HOUR 30 MIN
	OFTM	4___	SLEEP TIMER 2 HOUR
	OFTM	5___	SLEEP TIMER 2 HOUR 30 MIN
TEXT	TEXT	0___	TEXT OFF
	TEXT	1___	TEXT ON (TOGGLE)
	DCPG	***_	DIRECT PAGE JUMP (100 – 899)

NOTE

- If an underbar (_) appears in the parameter column, enter a space.
- If an asterisk (*) appears, enter a value in the range indicated in brackets under CONTROL CONTENTS.

PC compatibility chart

Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
VGA	720 × 400	31.5 kHz	70 Hz	
	640 × 480	31.5 kHz	60 Hz	✓
	640 × 480	37.9 kHz	72 Hz	✓
	640 × 480	37.5 kHz	75 Hz	✓
SVGA	800 × 600	35.1 kHz	56 Hz	✓
	800 × 600	37.9 kHz	60 Hz	✓
	800 × 600	48.1 kHz	72 Hz	✓
	800 × 600	46.9 kHz	75 Hz	✓

Resolution		Horizontal Frequency	Vertical Frequency	VESA Standard
XGA	1024 × 768	48.4 kHz	60 Hz	✓
	1024 × 768	56.5 kHz	70 Hz	✓
	1024 × 768	60.0 kHz	75 Hz	✓
WXGA	1360 × 768	47.7 kHz	60 Hz	✓
SXGA	1280 × 1024	64.0 kHz	60 Hz	✓
SXGA+	1400 × 1050	65.3 kHz	60 Hz	✓

Specifications

Item \ Model				LC-46GD7X	LC-52GD7X
LCD panel				46″ (117 cm) Advanced Super View & BLACK TFT LCD	52″ (132 cm) Advanced Super View & BLACK TFT LCD
Number of dots				6,220,880 dots (1920 × 1080 × 3 dots)	
Video Colour System				PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60	
TV Function	TV-Standard		Analogue	PAL: B/G, D/K, I SECAM: B/G, D/K, K/K_1 NTSC: M	
	Receiving Channel		Digital	DVB-T	
			VHF/UHF	44.25-863.25 MHz	
			CATV	S1–S41ch (including Hyperband)	
	Digital Terrestrial Broadcast			VHF/UHF 174–230 MHz, 520–582 MHz, 582–820 MHz	
	TV-Tuning System			Auto Preset 99 ch	
	STEREO/BILINGUAL			NICAM: B/G, I, D/K A2 stereo: B/G	
Brightness				450 cd/m^2	
Backlight life				60,000 hours (at Backlight Standard position)	
Viewing angles				H : 176° V : 176°	
Audio amplifier				15W × 2	
Speakers				6.5 cm 4pcs, 2.0 cm 2 pcs	
Terminals	Rear		ANALOGUE ANTENNA IN	75 Ω DIN type	
			DIGITAL ANTENNA IN	75 Ω DIN type	
			INPUT 1	VIDEO in, AUDIO in, COMPONENT in (480I, 576I, 480P, 576P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)	
			INPUT 2	VIDEO in, AUDIO in, COMPONENT in (480I, 576I, 480P, 576P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz)	
			INPUT 4	HDMI (HDMI input) (480I, 576I, 480P, 576P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz, 1080P/50Hz, 1080P/60Hz)	
			INPUT 5	HDMI (HDMI input) (480I, 576I, 480P, 576P, 720P/50Hz, 720P/60Hz, 1080I/50Hz, 1080I/60Hz, 1080P/50Hz, 1080P/60Hz), AUDIO in	
			INPUT 6	Ø 3.5mm jack (Audio input), DVI-I (DVI-I input)	
			MONITOR OUT	VIDEO out, AUDIO out	
			RS-232C	9 pin D-sub male connector	
			DIGITAL AUDIO OUTPUT	Optical Digital audio output	
	Side		INPUT 3	VIDEO in, AUDIO in, S-VIDEO in	
	Front		Headphones	Ø 3.5mm jack (Audio output)	
OSD language			Analogue	English/Chinese/Arabic	
			Digital	English	
Power Requirement				AC 110–240 V, 50 Hz	
Power Consumption				274 W (0.9 W Standby)	299 W (0.9 W Standby)
Weight	Display only			31.5 kg	37.0 kg
	with Display and speakers			35.0 kg	41.0 kg
	with Display, speakers and stand			38.0 kg	44.0 kg
Operating Temperature				0°C - 40°C	

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

Optional accessories

The listed optional accessories are available for the LCD colour TV. Please purchase them at your nearest shop.

- Additional optional accessories may be available in the near future. When purchasing, please read the newest catalogue for compatibility and check the availability.

Part name	Model number
Wall mount bracket (for LC-46GD7X/LC-52GD7X)	AN-52AG1
	AN-37AG2*

- You cannot change TV angles when you mount the TV on the wall using the AN-37AG2 wall mount bracket.

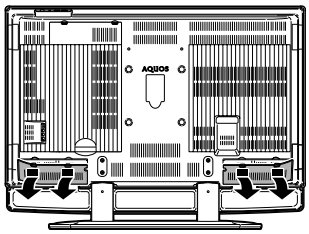
Removing the speakers

The unit's speakers can be attached and removed.

Before attaching/detaching the speakers

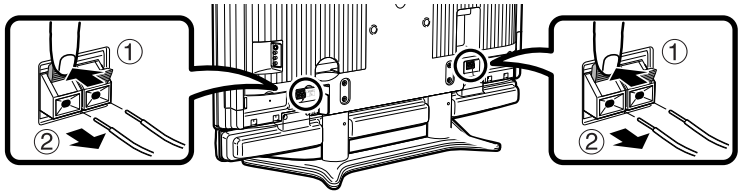
- Before detaching (or attaching) the speakers, unplug the AC cord from the AC outlet.
- Remove all terminal covers and connected cables.
- Make sure two or more people perform the operation when detaching (or attaching) the speakers.

1 Remove the two speaker terminal covers.



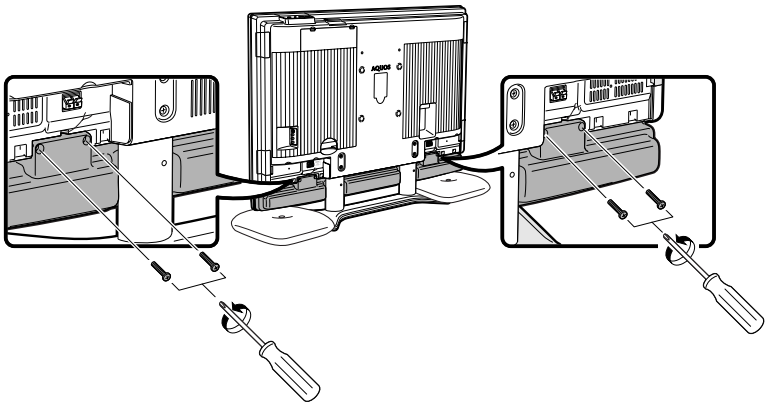
2 Unplug the speaker cables from the speaker terminals.

- Remove the speaker cables (②) while pushing in on the tabs on the speaker terminals (①).

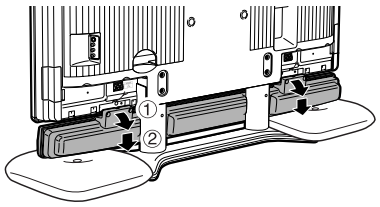


3 Remove the two screws on both the left and right of the speaker unit.

- Place cushioning on both sides of the stand to avoid scratching or damaging to the speakers.



4 Lean the speakers slightly toward you (①) and lay them straight down onto the cushioning (②).



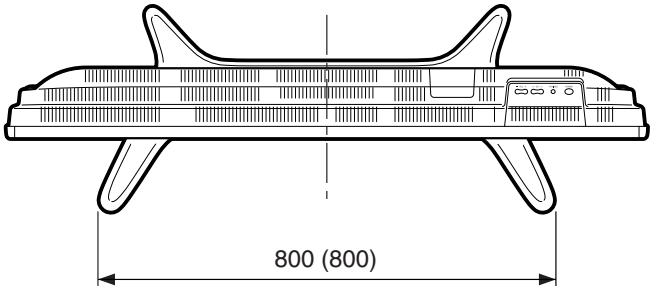
NOTE

- To attach the speakers, perform the steps in reverse order.
- External speakers can also be attached to the TV. (See page 40.)
- When the unit's speakers are already detached, the TV does not output volume unless external speakers are connected to the TV.

Dimensional drawings

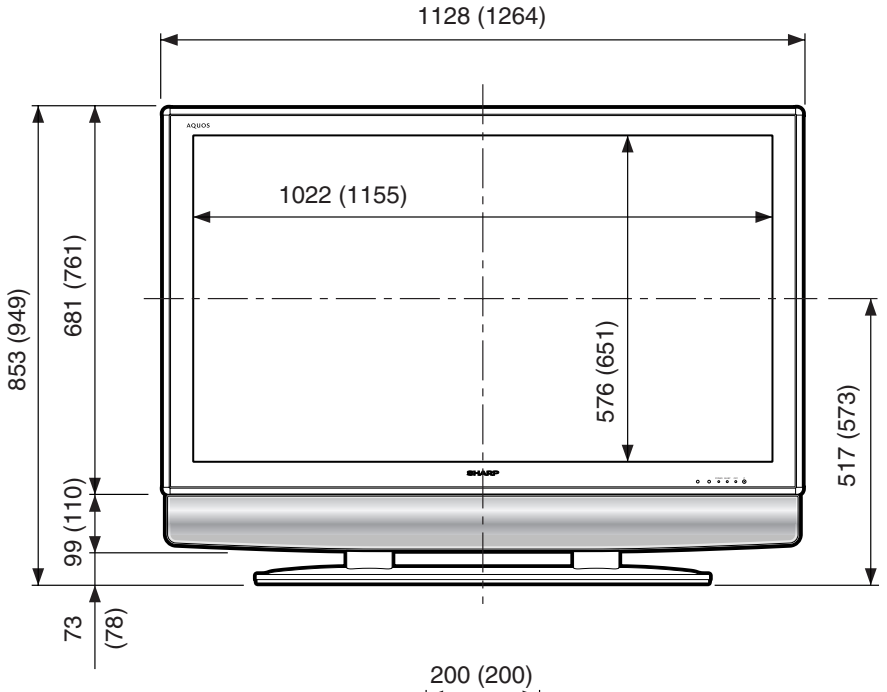
LC-46GD7X, LC-52GD7X

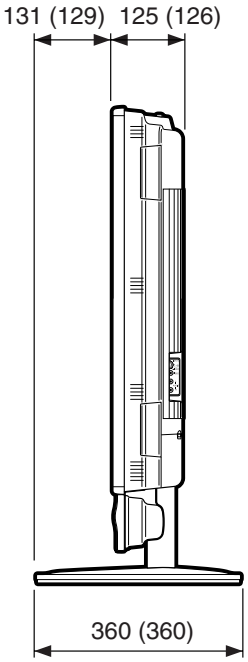
Unit: mm

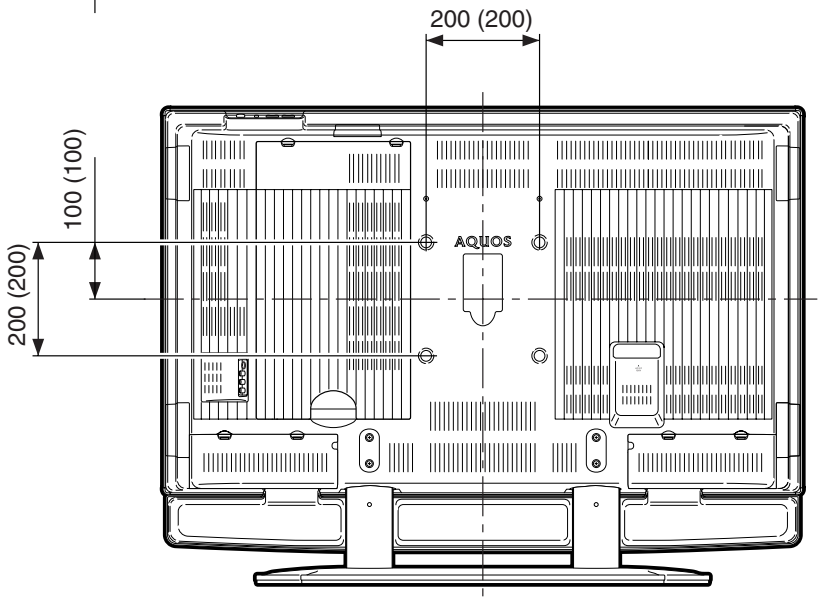


NOTE

- Figures within parentheses are for LC-52GD7X.

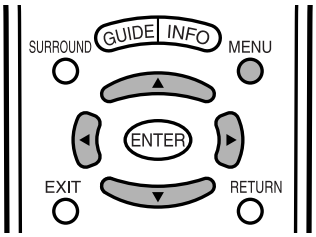






CLEARING THE PASSWORD

If you forget the password, clear the password using the following procedure.



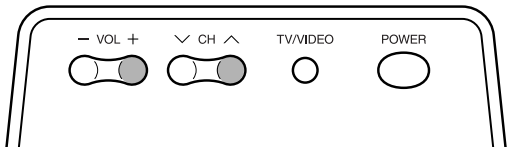
1 Press **MENU** to display the MENU screen, and then press ◀/▶ to select “Setup”.

2 Press ▲/▼ to select “Auto Installation”, “Programme Setup”, “Child Lock”, and the password input screen displays.

– – – –

3 Press and hold both **CH∧** and **VOL +** on the TV simultaneously until the message appears on the screen.

- The password resets to the factory preset “1234”.



The Password is | | | | | **.**

NOTE

- As a precautionary measure, make a note of your password above, scissor it from this manual, and keep it in a familiar place.

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If service is required during the warranty period, please contact your nearest Sharp Approved Service Centre. These repairs would be carried out at no charge to the owner, subject to the conditions specified herein.

The owner is responsible for any transportation and insurance costs if the product has to be returned for repair.

This warranty does not extend to accessories or defects or injuries caused by or resulting from causes not attributable to faulty parts or the manufacture of the product, including but not limited to, defect or injury caused by or resulting from misuse, abuse, neglect, accidental damage, improper voltage, liquid spillage, vermin infestation, software, or any alterations made to the product which are not authorised by Sharp.

Please retain your sales documentation, as this should be produced to validate a warranty claim.

This warranty is in addition to and in no way limits, varies or excludes any express and implied rights and remedies under any relevant legislation in the country of sale.

IMPORTANT
DO NOT RETURN THIS DOCUMENT TO SHARP

For your reference, please enter the particulars of your purchase below and retain, with your purchase documentation.

Model No. _____

Serial No. _____

Date of Purchase _____

Retailer _____

SHARP

SHARP CORPORATION OF AUSTRALIA PTY. LIMITED
ABN 40 003 039 405
1 Huntingwood Drive
Huntingwood NSW2148

SHARP CORPORATION OF NEW ZEALAND LIMITED
59 Hugo Johnston Drive
Penrose, Auckland

SPform030 (JUNE 2004)

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